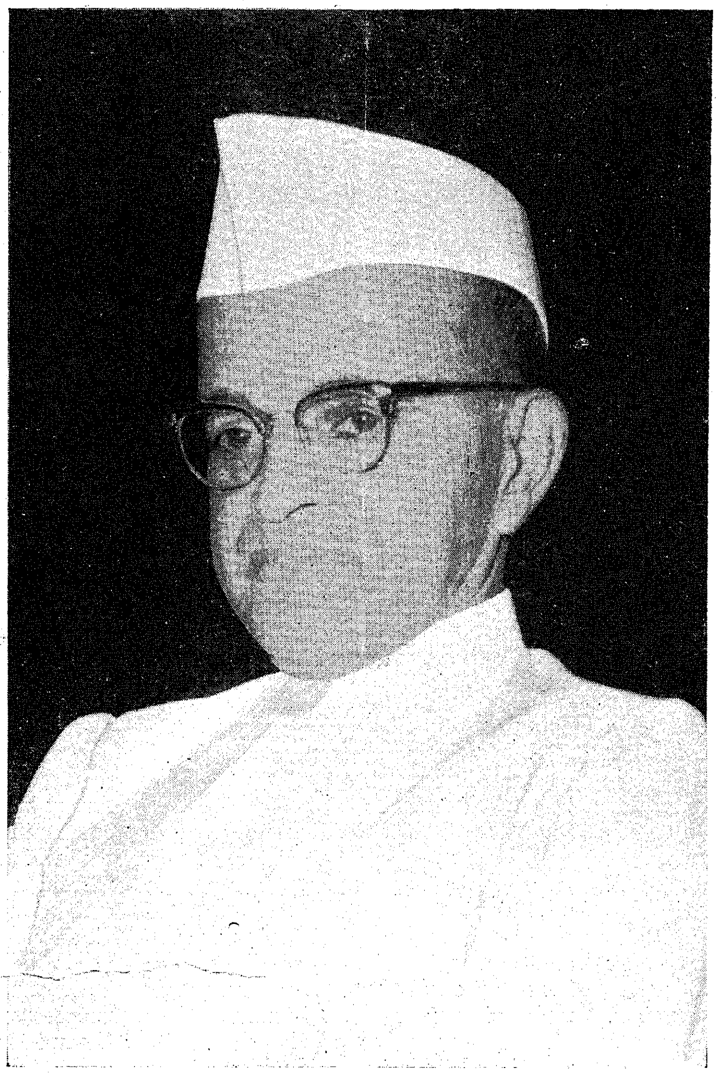
Price, 20 Naye Paise.

15 OCT 57

Madras Information

Published every month by the Director of Information and Publicity
Fort St. George

Vol. XI, No. 10 "WE SEEK TO SERVE AND NOT TO COMPETE" October 1957



We record with profound regret the sad and sudden demise of Sri A. J. John, Governor of Madras, at 1-50 a.m. on October 1, 1957, at the General Hospital, Madras.

Sri John had been admitted in the hospital for an operation on 20th September 1957.

A resolution touching the demise of Sri John was passed at the meeting of the Council of Ministers held on 4th October, 1957 :

"The Council of Ministers of the Madras State places on record its profound grief and sorrow at the sudden passing away of Sri A. J. John, late Governor of Madras, and conveys to Mrs. John and the other members of his family its sincere and heart-felt sympathy."

Sri P. V. Rajamannar, Chief Justice of Madras High Court, was sworn in as the Acting Governor of Madras at a simple and solemn ceremony held at the Secretariat at 11-45 a.m. on October 1, 1957.

Cover page: A view of the Agricultural College, Coimbatore.

Gram Raj thro' Panchayat Unions

Dynamic Move to Make People Plan Conscious

Our Constitution lays down as one of the directive principles of State policy that the State Government shall take steps to organize Village Panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of Self-Government.

In this State there were already enactments for the organizations of Village Panchayats. The Madras Village Panchayats Act, 1950, was passed shortly after the Constitution came into force and gave effect to the intention underlying this provision in the Constitution. It casts an obligation on the State Government to set up panchayats for every village and groups of small villages and it envisages complete coverage of the entire State with Village Panchayats within a reasonable time. It allotted a considerable number of additional functions and powers to Village Panchayats.

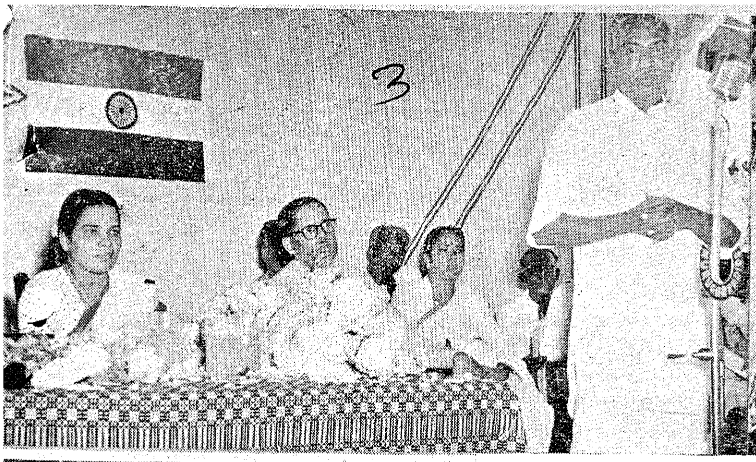
Since then Panchayats have been constituted in large numbers; but we are still very far from achieving complete coverage. Furthermore the expectation that they would take over and perform large new functions has not been realized. There are, indeed, a good many Panchayats of which it cannot be said that they are performing even the pre-1950 functions satisfactorily. The reason mainly is that the Village Panchayats created for small areas with very limited population are unable to employ trained personnel as full-time managerial staff. Nor do they possess adequate resources for maintaining needed technical services. Again, as each Panchayat covers a small area, there are far too many of them in every taluk and district. It is very difficult for Government to provide the services of experienced officers who could advise them and guide them. It seemed impossible to remove these difficulties unless Panchayats were constituted with a large territorial jurisdiction, so as to have at least as large a population as a medium sized Muncipality. But then would such bodies be Village Panhayats at all? Would they not be the same sort of bodies as the old Taluk Boards? Would the village people regard them as their own representative organizations? Unless this was secured, it seemed unlikely that any change would bring about an improvement. It looked as if Government were faced with a dilemma; if the Panchayat is to be genuinely representative and if the intimate needs of the village in respect of such matters as sanitation, water-supply, lighting and so forth were to be properly attended to, it had to be formed for the village which the people themselves recognize as the natural unit. But if the Panchayat is to look after anything more, and provide other services efficiently, it had to be formed for a distinctly larger unit.

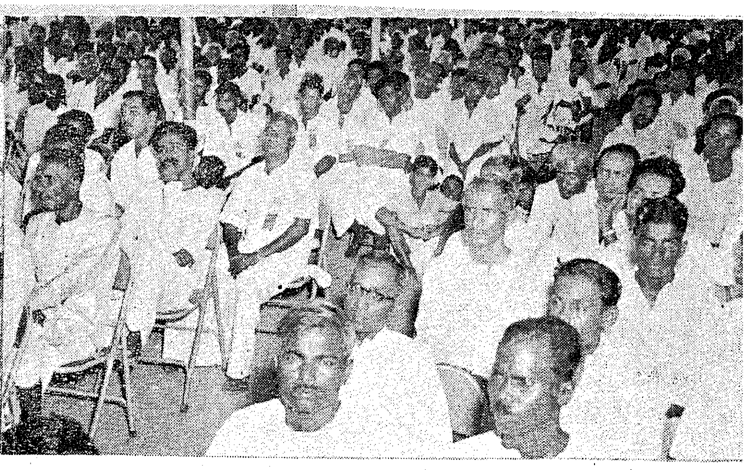
Organic Contact

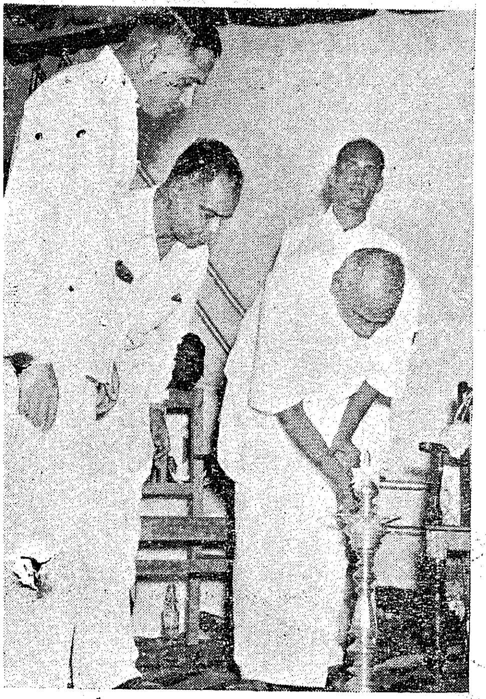
It so happened that the way out of this difficulty is indicated in the 1950 Act itself. The Act provides for the constitution of Statutory Joint Committees for contiguous Panchayats. The Madras District Boards Act also provides for the district board joining with panchayats in performing the functions in which both the panchayats and the district board are jointly interested. The 1950 Act also provides for the establishment and mainteneance by two or more panchayats of common institutions like dispensaries, child-welfare centres, etc. and for the appointment of the same officer to exercise the powers and discharge duties of a similar nature in respect of all of them. The principle underlying these provisions of law offered a way out of the difficulties mentioned. The individuality of the Village Panchayat and its organic contact with the village people whom it represented can remain and continue to be maintained. But it need not undertake to perform any functions other than those which it was specially fitted to perform satisfactorily. For other functions, Panchayats of contiguous villages could come together and set up a common organization for a larger area. Those services which could not be provided to the village people by each Panchayat individuality, could be provided in common, by a Co-operative union of all of them. Thus the idea of a 'Panchayat Union' was formulated. In strict legal terminology, Panchayat Union can be merely Statutory Joint Committees of all the Village Panchayats concerned, as well as of the District Board.

Villages as participants

The need for an organization of this nature was at the same time, pressed upon the attention of Government from a different direction. The National Extension Service Scheme of Community Development, India's great experiment in the organization of Rural Development had got under way and come to stay. The decision had been taken to extend the Scheme from year to year according to a phased programme by which all the Villages of the State would be covered by the end of the Second Five-Year Plan period. It was an essential feature of the ideas underlying this Scheme that the village people should themselves take part in the formulation and execution of the various improvements undertaken under the Scheme. Every village was to become a participant in successive Five-Year Plans by which the nation as a whole is marching in step to achieve the aims embodied in our Constitution. The Government of India observed that the progress achieved in respect of active partcipation by the village people was inadequate. The *Ad hoc* Committees which had been formed in order to advise the local agencies of Government were indeed useful work; but they did not suffice to make the people feel that that useful work was their own. That was why the Planning Commission has been emphasizing the need for developing village panchayats as the agency for village planning and development and thus constructing a solid foundation for the entire



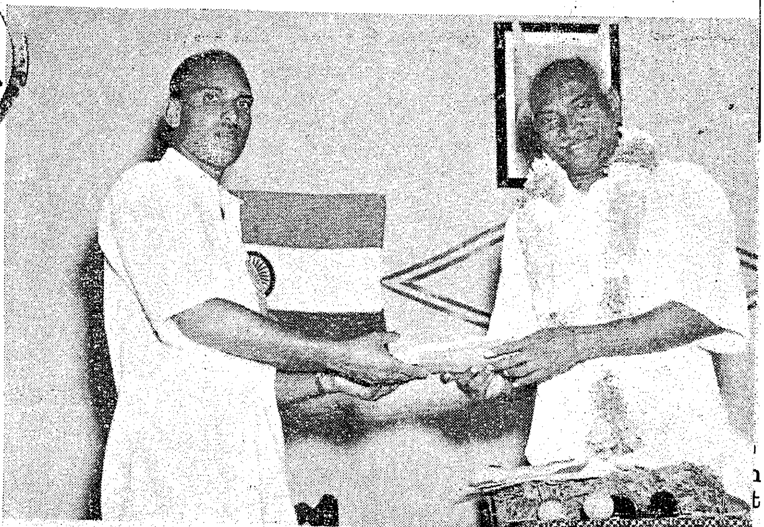




Inauguration of North Madurai Panchayat Union

To make the functioning of village panchayats more effective and take over the responsibilities of District Boards ultimately the State Government have decided to form Panchayat Unions all over the State with one for every Development Block. The first of its kind—the North Madurai Panchayat Union was inaugurated in the third week of September at Arambanur by Chief Minister, Sri K. Kamaraj. Srimathi Lourdhammal Simon, Minister for Local Administration, Presided.

1 0 OCT 1957
MADRAS



The centre pictures show the Chief Minister lighting a Kuthuvilakku and handing over the Cheque Book and other documents to the elected President of the Union, Sri Muthukaruppan Ambalam.

Functions of District Boards to be Transferred to Unions

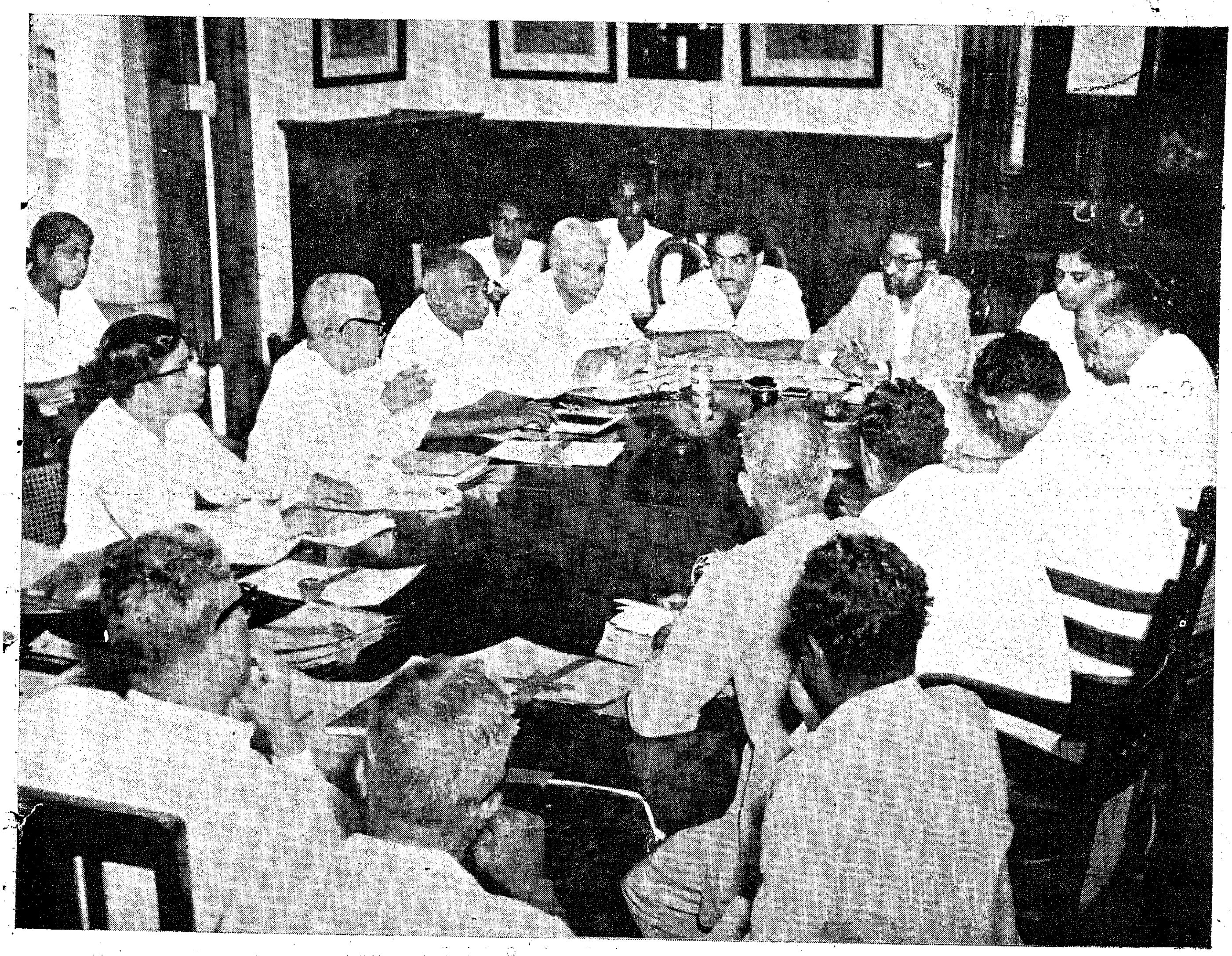
system of National Planning. It was recommended that village panchayats should be organically linked with popular organizations at a higher level and that (by stages determined in advance) democratic bodies should take over the entire general administration other than such functions as law and order, administration of justice and certain functions pertaining to revenue administration.

It was in the light of All-India policy set out in these terms that the proposals for the reorganization of panchayats were reviewed by the Government. The Government arrived at provisional conclusions and embodied them in a "White-Paper on Local Administration" which was placed before the Legislature last year. According to the proposals in the White Paper, the execution of the scheme of Development and Reform of Panchayat Organization should be linked to the execution of Scheme of Community Development. By the end of the Second Five-Year Plan period, there should be a Panchayat for every village in the State without exception. Panchayats in a Development Block should be brought together in Panchayat Unions, and to this end, statutory Joint Committees should be set up. These Committees should be provided with funds and executive staff—technical and administrative guidance.

The proposals in the White Paper of last year, were further reviewed, re-examined by the present Government after the general elections and their revised proposals, covering the whole field of local administration will be placed before the Legislature at its next meeting. So far as Panchayats and Panchayat Unions were concerned, the Government decided to proceed with the provisional conclusions already reached; and in order to ascertain in detail all the administrative, financial and technical implications, they decided to organize a Panchayat Union in one selected Development Block. The North Madurai Panchayat Union was the first to be organised. A memorandum outlining detailed proposals was prepared. The proposals were explained to the villagers and the members of the Panchayats in the Block. They welcomed the idea, which was therefore put into effect.

The North Madurai Panchayat Union consists of the five revenue firkas of Kunnathur, Koolapandi, Othakadai, Arumbanur and Samayanallur. There are 172 revenue villages with a population of a little over one lakh. The Union area is divided into six Panchayat Union Circles, at the rate of one Circle for every firka except in the case of the Samayanallur firka which has a large population and which has therefore been divided into two Panchayat Union Circles. There were 39 Panchayats constituted for 105 revenue villages. Sixty-seven revenue villages had to be covered by new Panchayats. Many of these 67 revenue villages were unduly small. They were, therfore, grouped into 30 Panchayat Villages. Thus the six Panchayat Union Circles include 39 old and 30 new Panchayat Villages or 69 in all. Under the old rule, the number of Panchayatdars to be elected as representatives of one Panchayat Village could not exceed seven. In order to diminish unhealthy competition for membership and in order also to facilitate participation by the natural leaders of different social and economic groups in the village, the strength of panchayats to be newly formed was refixed at the rate of one member for every 100 people for the first 500 population and one member for every 200 people in excess of 500 subject to the maximum of 15 laid down in the Act.

The Panchayat Union was then formed with Councillors chosen by the Panchayats of each of these 69 Panchayat Villages. The scale of representation was fixed at the rate of one Cuncillor for every Panchayat Village having a population of not less than 1,000 and not more than 3,000. A few village having a population exceeding 3,000 returned 2 councillors each. At the other end Panchayat Villages which (even after grouping) have a population of less than 1,000 are grouped in pairs; and they will send one Councillor to represent each Panchayat Village in alternate years. In the opinion of the Government, it is especially important that every Councillor of the Panchayat Union should be a representative of some Panchayat Village or another. The Panchayat Union is a Co-operative Union or federation of the Panchayats—it is not an external authority created on a different basis altogether. The new rules provided that the Councillors should be chosen by the respective Panchayats on the basis of the principle of near—unanimity favoured by the Government of India. The Panchayats Union Council will consist in addition to these elected representatives of Panchayats a few other members also. The three members of the Madurai District Board representing the district board circles of Madurai-*cum*-Samayanallur, Koolapandi-*cum*-Arumbanur and Othakadai-*cum*-Kunnathur will be the representatives of the district board on the Council. The Member of the Legislative Assembly representing the Melur General Constituency will be an ex-officio member of the Council. The Block Development Officer of the Madurai Block having jurisdiction over the Panchayat Union area will also be an ex-officio member of the Council. There will be a Chairman of the Council, who will be a member of the Council other than an ex-officio member and will be elected by all the members of the Council other than the ex-officio members. There will be six Circle Committees of the Union, one for each of the six Panchayat Union Circles and the representatives of the Village Panchayats of that circle will constitute the Circle Committee. Provision has been made for ensuring that there is at least one Harijan member on every circle committee, by co-option, if necessary. The members of every circle Committee will elect from among themselves one member as a Vice-Chairman of the Panchayat Union Council and he will be the presiding Officer of the Circle Committee concerned. All the six Vice-Chairman of the Council will take rank by seniority reckoned according to age. The Block Development Officer who as already said is an ex-officio member of the Union will be the executive authority of the Union. In that capacity he will be designated as the Panchayat Union Commissioner; and his relationship to the Panchayat Union will be the same as that of a Municipal Commissioner to a Municipality.



The Foodgrains Enquiry Committee headed by Sri Ashok Mehta was in Madras in the last week of August. The Committee held discussions with the representatives of Madras Government about the prevailing prices of foodgrains and possible steps to arrest prices from getting out of control.

The Village Panchayats will attend to the elementary needs of the village which are essentially the pre-1950 functions, namely, construction and maintenance of roads and streets in the village, lighting of such roads and streets, cleansing of streets, provision of drinking water-supply and drain and provision of laterines and cleansing them For raising funds for these purposes, they will continue to have power to levy house-tax, profession-tax, vehicle tax and a land cess of 3 pies in the rupee of land revenue. The Panchayat Union will perform all functions vested in the Village Panchayats under the 1950 Act other than those mentioned above as well as the functions performed by the District Board in the Union area. Therefore all the other district roads and village roads under the control of the District Board will be transferred to the Panchayat Union for maintenance. The buildings connected with the institutions transferred to the Panchayat Union will be transferred from the District Board to the Union. The schemes of road development included in the Second Five-Year Plan so far as they relate to the district board and lie within the Panchayat Union area will be executed through the Panchayat Union. As all elementary schools and Maternity Child Welfare Centres maintained by the District Board in the Union area will be transferred to the Panchayat Union, it will be the duty of the Panchayat Union to maintain and develop them. The development of primary education is one of the most important among the purposes intended to be secured by the constitution of the Panchayat Union. The duty of bringing about the planned development of primary education is laid on the Panchayat Union. The planned development of maternity and Child-Welfare Centres included in the Second Five-Year Plan will be executed through the Panchayat Union. For rendering all these services, the services of the personnel of the National Extension Service Scheme will be placed at the disposal of the Panchayat Union and village panchayats free of cost. The pattern of financial assistance normally rendered by the Government to local bodies will be liberalized and resettled in its application to the Panchayat Union in such a way as to enable it to play its part effectively as a participant in the National Five-Year Plan at present under execution and the others still to come.

Towards a Socialist Pattern of Society

Co-operation Marches on

By Sri A. PALANIAPPA MUDALIAR, I.A.S., Registrar of Co-operative Societies.

Co-operation, rightly understood, is the principal means of securing the ends of a socio-economic policy designed to establish a socialist society. It is perhaps the best method which maintains the individual freedom and collective responsibility in sound balance and thus aids the achievement of socio-economic prosperity without sacrificing the dignity of the individual. In whatever field it enters, it ensures equality and justice. There is practically no field of human activity in which its application will not be beneficial to society. In the agricultural sphere, its adoption secures to the toiling ryots, the maximum return for their labour by enabling them to obtain the facilities needed for their operations on advantageous and reasonable terms and to secure a fair price for their produce. On the distributive side, the adoption of the co-operatvie method ensures fair play and equity to all and the benefits of economic prices to the consumers. In the industrial field, there is no alternative to co-operative organisation for rehabilitating and promoting the village and small-scale industries. In short, co-operation is both a way of life and a moral force which promotes better business and better living.

Co-operation and Planning.

In a country like ours where 80 per cent of the population are agriculturists living in villages, the development of the rural economy should assume great importance in any scheme of National Development and National Planning. Since Co-operation harmonises with the social objectives and principles laid down in our Constitution and since its highlights are equality of all, voluntary association, democratic management, distributive justice and self-help through mutual aid, there can be no doubt that the co-operative organisation is the most effective instrument for promoting the agricultural and rural economy of the country. That is why the Planning Commission has expressed that " in a regime of planned economy, co-operation is an instrument which, while retaining some of the advantages of decentralisation and local initiative, will yet strive willingly and readily the overall purposes and directives of the plan ". The Planning Commission has accordingly recognized co-operation as an instrument of democratic planning combining initiative, mutual benefit and social purpose. The building up of a co-operative sector as part of the scheme of National Development has, therefore, been one of the principal aims of our National policy. The spheres which have been assigned to co-operation are agricultural credit, marketing and processing, all aspects of production in rural areas, consumer co-operatives, co-operatives of artisans and labour and construction co-operatives.

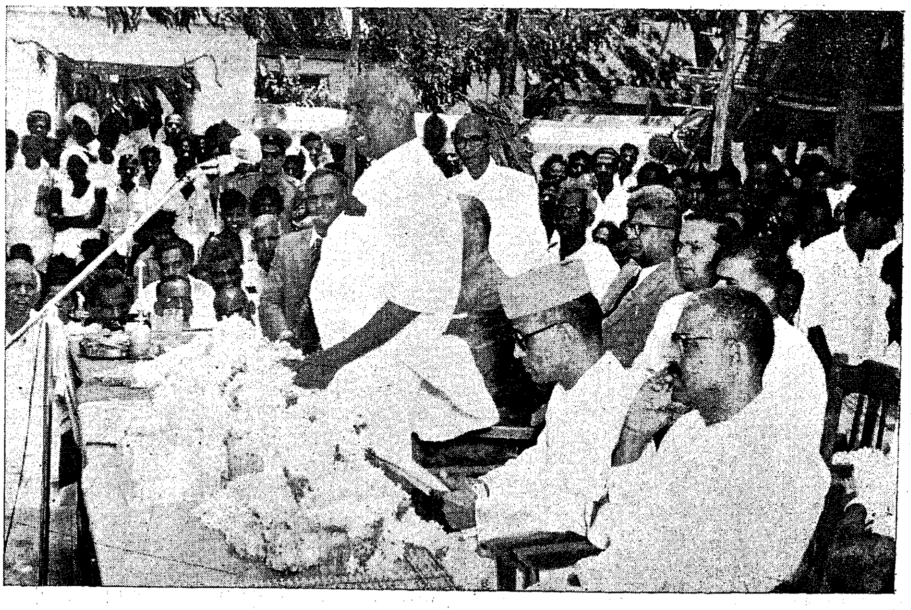
The major programme launched now for changing the phase of our rural economy is the organisation of Community Development and National Extension. The main purpose of this programme is to provide a setting in which the needs and aspirations of the country-side will be realized and to secure rapid advance along democratic and egalitarian lines bringing about a sizable increase in the national income so as to raise the level of living in the country, expanasion of employment opportunities and reduction of inequalities in income and wealth and more even distribution of economic power. In carrying out these programmes of Community Development and National Extension Service, there should be a sense of participation by the people and a definite plan of work for improving the standard of living of every rural family. Such a sense of participation can be ensured mainly through the development of co-operative activities, because, these organisations are designed to improve the economic and social condition of the village community, especially the small farmers, the landless tenants, the agricultural labourers and the artisans. It therefore needs no emphasis that the programme of Community Development and National Service should be effectively integrated with the programme of co-operative development. The Co-operative form of organisation has advantages which neither private enterprise nor State ownership can match. In particular, it offers " a means of achieving results valuable to the community by drawing upon incentives which are social and incentives which are individual ". It brings, where it succeeds, " much gains to the community ". Basically, in rural areas, the purpose of co-operation is to evolve a system of co-operative community organisation which touches upon all aspects of life. Co-operation should therefore mean an obligation towards all families in the village community and the development of land and other sources and of social services in the common interest of the village and the community as a whole. Programmes of Co-operative Development have been formulated broadly on the basis of this objective and mainly for the purpose of changing the economy of the country from an individualistic to a socially-regulated one.

Co-operative Credit.

The Co-operative Movement, which was started five decades ago in this State, as in the rest of the country, with the modest objective of relieving rural indebtedness, now embraces a diversity of interests and enterprises. Practically, there is no sphere of economic activity which has not felt the vitalising impact of this movement. In the production and distribution of essentials of life, the co-operative organisations have been playing a prominent role. The movement has made great and rapid strides espicially, in the fields of agricultural credit dairying and milk supply and housing.

In the sphere of agricultural credit, the co-operatives have helped in lowering the lending rate in the country-side and have afforded the ryots a suitable agency for providing seasonal finance on reasonable terms. There is, in this State, a strong and well-defined co-operative credit structure. The Madras State Co-operative Bank at the apex level, 14 central co-operative banks at the district level and about 9,000 primary credit societies at the village level provide short-term and medium-term finance to the agriculturists. In the sphere of long-term agricultural finance, the Madras Central Land Mortgage Bank and its affiliated primary land mortgage banks are playing a vital role. At the end of 1955–56, the co-operatives had covered nearly 68 per cent of the villages and brought within their fold 24·25 per cent of the rural families. The total credit provided to the ryots by the societies by way of short-term, medium-term and long-term loans during 1955–56 amounted to about Rs. 6 crores representing approximately 10 per cent of the estimated annual credit needs of the agriculturists. Nearly 97 per cent of the loans issued by the co-operatives were for productive purposes. Besides the agricultural credit societies, a special type of co-operative credit organisation known as rural co-operative banks was also formed in the year 1955–56 for providing medium term agricultural credit and banking services to the rural population and incidentally also for trying the experiment of large-sized credit units at the primary level. Twenty-six such banks were established of which there are now 23 banks in the reorganised Madras State. While the performance of the co-operatives in the field of agricultural credit in the State is by no means small, there is still a vast field to cover, particularly in the matter of extending the credit facilities to a larger section of the agricultural community and for this purpose, to revitalise the units at the primary level. With this aim in view, an integrated rural credit scheme was drawn up as one of the major co-operative development schemes in the Second Five-Year Plan of this State. This scheme which is based upon State participation in the share capital and management of the societies, full co-ordination between credit, marketing and other economic activities and the administration of the societies through trained personnel as suggested by the All-India Rural Credit Survey Committee, aims at bringing within the co-operatives, nearly 80 per cent of the villages and 50 per cent of the rural families and providing agricultural credit for short-term, medium-term and long-term purposes to the extent of Rs. 18 crores so as to meet about 30 per cent of the total credit needs of the rural people by the end of the Second Five-Year Plan. Before the scheme was implemented on a State-wide basis, a pilot scheme embodying the salient features of the main scheme was worked in two select taluks in each of the four districts of Tirunelveli, Coimbatore, Ramanathapuram and Chingleput and in view of the good response accorded to the scheme by the people and in view of the results achieved especially in the formation of large-sized units at the primary level and the expansion of the credit and marketing activities, the scheme was extended to the whole State in July 1956 and is now in full swing throughout the State. With a view to make concentrated work possible and to take advantage of the facilities locally available, the scheme is being worked intensively in select areas, especially the Community Development and National Extension Service Blocks. Seventy-four out of 108 blocks in the State have thus been selected for the intensive working of the scheme.

A new line of development in the sphere of agricultural credit has been the organisation of large-sized societies at the primary level. In the context of the increased supply of institutional credit with a view to facilitating increased agricultural production, these primary units are playing a more responsible role in the supply of agricultural credit. They have also made a beginning in the direction of mobilising rural savings and channelling the funds for useful productive purposes. Three hundred societies of this type were programmed to be formed during the plan period and 92 societies have been formed so far. By the end of 1957–58 there will be 240 such societies in the State. The performance of the large-sized societies established so far has been quite encouraging. They had at the end of July 1957, 57,365 members on their rolls with a paid-up share capital of Rs. 14·79 lakhs and they held deposits to the extent of Rs. 9·82 lakhs. They issued during the current year up-to 31st July, loans amounting to Rs. 48·33 lakhs. An experimental scheme for the disbursement and recovery of cultivation loans to ryots in kind, i.e., in the shape of manure, seeds, etc., has also been undertaken through the agency of these institutions at the suggestion of our Hon'ble Chief Minister. Fifteen societies selected for the purpose have issued loans to the



Sri K. Kamaraj, Chief Minister, made a district-wide tour of North Arcot in the last week of August. He is seen here addressing a meeting at Anakavur after inaugurating an Ag. Co-operative Bank there. Sri M. A. Manickavelu, Minister for Revenue and Sri B. Bhaktavathsala Naidu, Deputy Speaker, were also present.

Co-operatives as sole supplier of short and medium term loans

extent of Rs. 2·12 lakhs in the shape of manures and seeds upto 31st July 1957. The 23 rural co-operative banks started prior to the introduction of the scheme have also developed pretty well. They had on their rolls 20,045 members with a paid up share capital of Rs. 9·82 lakhs. The deposits held by them from members and non-members amounted to Rs. 15·87 lakhs. They advance loans repayable within 3 to 5 years, for medium term agricultural purposes such as reclamation of lands, purchase of pumpsets, digging of wells, etc. They also issue loans on the pledge of jewels and produce to their members and provide a variety of banking facilities to the villagers. The amount of loans issued by them during 1956–57 was Rs. 55·28 lakhs and the loans outstanding against members on 30th June 1957 amounted to Rs. 52·10 lakhs. Alongside the formation of large-sized societies, the development and strengthening of the activities of the existing rural credit societies as also the formation of such societies wherever there is demand for them have been undertaken as part of the scheme of expansion of credit. About a thousand small-sized societies are proposed to be formed during the plan period at the rate of 200 societies each year and over 250 societies have been registered already. On the side of long-term credit, the plan provides for the organisation of 23 more primary land mortgage banks during the plan period and of these, six banks have already been formed with the result that there are now 72 primary land mortgage banks functioning in the State. A significant feature in the working of these banks since the introduction of the integrated credit scheme in the Second Five Year Plan is the high priority given to loans for production, land improvement and development purposes such as sinking of irrigation wells, repairs and construction of tanks for agricultural purposes, installation of pumpsets, etc. As a result of the endeavours made by the banks to develop their transactions, they issued loans to the extent of Rs. 58 lakhs during the year 1956–57.

The operation of the Integrated Credit scheme during the first year of the plan period (viz) 1956–57, resulted in a general expansion of the activities of the credit co-operatives. They have extended the sphere of their usefulness to 71 per cent of the total villages and 28 per cent of the rural families in the State and have provided agricultural credit both for production and marketing to the tune of Rs. 8·76 crores thereby meeting about 15 per cent of the total credit needs of the people.

An interesting experiment in the matter of supply of credit has been launched with a view to making the co-operatives the sole supplier of credit short-term and meidum term loans—in select areas. The objective of this experiment is to meet the entire short-term and medium-term credit needs of the agriculturists in the area, through the agency of the co-operatives to the exclusion of all other sources of credit including Government in the shape of taccavi loans. This experiment is being worked in the Erode Firka of the Lower Bhavani Community Project area of the Coimbatore district and the Srivilliputtur National Extension Service Block in the Ramanathapuram district. A special staff has been employed for implementing the scheme. All the villages in the two firkas are served by co-operatives. Within a period of about six months since the introduction of the scheme, the co-operatives in the Erode firka have increased the percentage of the rural families served by them from 20·2 to 32·8 and expanded the volume of credit provided by them from 9 per cent to 20 per cent of the total credit needs. In the Srivilliputtur firka, 22 per cent of the families are now served by the societies and 40 per cent of the credit needs of the cultivators met by them as against only 12·4 per cent of the families served by them and 14 per cent of the credit needs met by them at the time of introduction of the scheme. It is expected that by the end of the current financial year, 75 per cent of the rural families will be brought into the co-operative fold and nearly two-thirds of the total credit needs of the cultivators in these two firkas would be met by the co-operatives.

While the agricultural credit societies, provide credit to the rural people, there are urban co-operative banks and employees co-operative credit societies in the State to cater to the needs of urban population such as artisans petty traders, employees, etc., who need institutional credit as much as the agriculturists to protect them from the usurious money-lenders. In fact the co-operative credit movement has taken deep root in the urban and semi-urban areas. Some of them are catering to the needs of the agriculturists also residing within their area of operations. On 31st December 1956, 176 banks were functioning in the State with 3·44 lakhs of members on their rolls and a paid up share capital of Rs. 80·26 lakhs. These banks issued loans to the tune of Rs. 2·53 crores during the half year ended 31st December 1956. The deposits held by them amounted to Rs. 3·86 crores. Most of the banks are carrying on their business with their own resources. As regards employees societies, there were 455 of them in the State at the end of December 1956, with 1·61 lakhs of members and paid up share capital of Rs. 95·72 lakhs. During the half year ended 31st December 1956, they issued loans to their members to the extent of Rs. 271·45 lakhs.

Co-operative Marketing.

The disabilities from which the farmers suffer in selling their produce provide the justification for co-operative marketing which strengthens their position as a seller, assures them of regular trade outlet and enables them to obtain better prices. There were in the pre-reorganised Madras State, 119 primary marketing societies on 30th June 1956 with a membership of 1·49 lakhs and a paid up share capital of Rs. 21·69 lakhs. During the year 1955–56, they issued loans to the extent of Rs. 123·81 lakhs and marketed produce as agents and owners to the value of Rs. 2·22 crores. They also distributed seeds, manure, etc. to the value of Rs. 50·89 lakhs. With a view to develop the activities of co-operative marketing societies, a scheme for the development of co-operative marketing of agricultural produce is now under implementation. This scheme envisages the formation of 30 more primary marketing societies so as to cover all market centres and mundies in this State and to develop the business of all the societies according to a phased programme, the objective being that the marketing societies should be able to handle at least 10 per cent of the marketable surplus produce, by the

end of the plan period, as against the present level of less than 2 per cent.

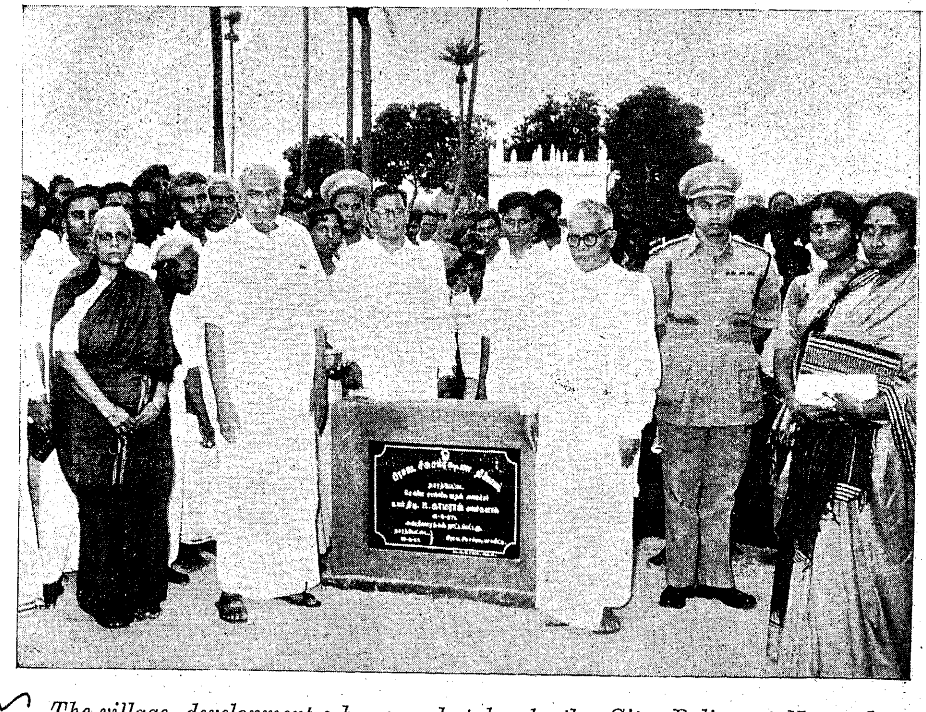
To facilitate marketing, the programme includes the construction of 245 godowns by the end of the plan period. The installation of 17 cotton gins and 15 groundnut decorticators by marketing societies is also one of the features of the scheme. For carrying out the marketing and supply activities at the district level, the scheme provides for the reorganisation of the existing co-operative wholesale stores into district supply and marketing organisations. There is also provision for the organisation of a State Co-operative Marketing Society during the third year of the plan period for co-ordinating and centralising the functions of marketing co-operatives at the State level. Efforts are being made to expand the activities of the marketing societies especially those situated in the taluks where the credit scheme is in intensive operation. As a result of these efforts, 4 new marketing societies were established in 1956–57. Thirty five marketing societies which were selected for intensive development during the year made good progress. They brought into their fold 1,00,463 members and collected a share capital of Rs. 13·30 lakhs from them up to 31st March 1957. During the year 1956–57, they issued loans on the pledge of produce to the extent of Rs. 33·73 lakhs and marketed produce worth Rs. 74·72 lakhs and sold agricultural requirements to the value of Rs. 58·20 lakhs. Twenty-seven of these societies received State share capital to the extent of Rs. 2·20 lakhs.

Increased attention is being paid to the integration of credit provided for cultivation by the credit co-operatives with the marketing operations of the marketing societies. Loans are advanced by the credit societies to their members after taking from them an agreement to the effect that the produce grown with the loan would be sold through the marketing society to which the credit society is linked. By way of integrating credit with marketing, 584 societies were linked to the marketing societies till 31st March 1957 and they provided during 1956-57 cultivation loans to the extent of Rs. 18·72 lakhs. The value of the produce brought by the borrowers of these societies for sale to the marketing societies was Rs. 65·24 lakhs between April 1957 and July 1957. The marketing Societies selected for intensive development issued loans on the pledge of produce to the tune of Rs. 45·08 lakhs and marketed produce worth Rs. 51·64 lakhs. The construction of seven godowns was completed during 1956–57 and it is expected that about 50 godowns will be put up by the marketing and credit co-operatives with the aid of Government subsidy and loan by the end of 1957–58. For the promotion of co-operative marketing and development and ware-housing, steps are being taken to establish a a State Warehousing Corporation parallel to the Central Warehousing Corporation already established at the capital of the country. The Government have appointed an officer of this department as a Special Officer for preliminary work connected with the setting up of this State Warehousing Corporation. The Corporation, when established, will construct godowns at select centres and provide warehousing facilities.

Processing Societies—Co-operative Sugar Mills.

A notable line of development in recent times is the formation of processing co-operatives so as to encourage agriculturists to organise and establish processing industries based on the crops produced by them. Three co-operative sugar mills which will be owned and managed by sugar-cane growers have been formed, one in the North Arcot district at Ambur, another in the Chingleput District at Maduranthakam, and the third in the Coimbatore district at Udumalpet. They have 2,556 cane-growers on their rolls and have raised substantial share capital from them. The Government have invested a sum of Rs. 25 lakhs in two of them and will make a similar investment in the third society also. All the three mills have taken necessary steps for the purchase of machinery and also for the construction of necessary buildings. One more sugar mill will be established during this year at Namakkal in the Salem district. When these mills begin to function, the sugar-cane growers will not only get fair prices for their cane but also a share of the profits of the sugar industry.

A co-operative cotton spinning mill composed of cotton growers has also been registered at Srivilliputtur in the Ramanathapuram district. The peculiar feature of this institution is that it embraces not only the growers who provide the raw materials but also



The village development scheme undertaken by the City Police at Nazarethpet near Poonamallee was inaugurated by Sri K. Kamaraj, Chief Minister, in the third week of August. Sri M. Bhaktavatsalam, Minister for Home, presided. It may be recalled that the City Police built houses for the Harijans at Kattupakkam village as part of their reconstruction work.

Eight thousand acres under Co-operative Farming

weavers societies who would consume the finished products. The society will commence working with 12,000 spindles shortly.

Co-operative Farming.

There were 30 Co-operative farming societies of the tenant farming type in this State for agricultural labourers and ex-servicemen and they had brought under cultivation 8,055 acres of lands upto 30th June 1957. The attempts at co-operative farming so far made in this State have been in the direction of tenant farming with the main idea of settling Harijans and the landless poor on land. While this kind of societies should be encouraged in the interests of the type of people for whom they are intended, there is, of late, an increasing recognition of the need for collective endeavour in agriculture by pooling small holdings owned by ryots and undertaking joint or collective cultivation of these lands by the adoption of improved methods of agriculture. It is believed that by doing so agricultural production can be increased. The report of the Patil Delegation to China on Farming Co-operatives has been published and it is expected that a definite policy in regard to the development of Co-operative farming in the country will be evolved soon. In the Madras State, organised efforts are now afoot in the direction of farming co-operative farming societies of the joint farming type wherever the people come forward voluntarily to pool their holdings and cultivate them jointly. A co-operative joint farming society was established at Valundur in the Madurai district towards the close of the year 1955-56. Following this, two more societies of the same type have been formed one at Sivagiri in the Chingleput district and another at Nadhagoundanpudur in the Coimbatore district. A Co-operative Tenant Farming Society has already been registered at Nainarpalayam in the South Arcot district. In the Valandur joint farming society, 165 members have so far pooled their lands for joint cultivation. The other societies will begin work shortly. Proposals are on hand for the formation of a joint farming society at Bakkapuram in the Nilgiris district, a collective farming society at Randham in the North Arcot district and a tenant farming society at Kilianur in the South Arcot district. These proposals will be finalised soon. It is hoped that the formation and working of these societies will pave the way for spreading the ideal of co-operative farming and that the small landholders in the other parts of the South will enthusiastically and voluntarily come forward to form themselves into similar co-operative societies by pooling their lands and resources for joint cultivation.

The organisation of more co-operative farming societies of the collective type has also become possible on account of the lands made available under the Bhoodan Yagnya. An experiment in this direction has been undertaken in this State and a Co-operative Farming Society has been registered recently at Thannirpandalpudur in the Coimbatore district where Bhoodan lands covering an extent of about 300 acres are proposed to be utilised for the benefit of about 60 families of landless people. The gramdan movement which is spreading slowly but steadily in the country affords the most congenial climate for the successful operation of co-operative farming organisations.

Dairying and Milk Supply.

Dairying is one of the most useful subsidiary occupations undertaken by agriculturists to supplement their income. The organisation and development of dairying on a co-operative basis enables the agriculturists to augment their income besides improving the cattle wealth, increasing milk productions, ensuring supply of adequate quantities of pure milk to the public and raising the per capita consumption of milk which is comparatively low being 4·18 oz. in the Madras State as against 5·5 oz. for All-India and 30 to 35 oz. in the Western countries. In Madras, efforts have been made with a fair amount of success for organising the Dairy Industry on Co-operative lines. At the end of 1955-56, there were 19 milk supply unions and 586 milk supply societies functioning all over the State. Schemes are under implementation under the Second Five-Year Plan for stepping up production, for preserving milk for longer periods by establishing pasteurisation plants so as to facilitate distribution and for improving the cattle wealth in the State. The scheme aims at the organisation of more milk supply co-operatives and the development of the business of the existing ones so as to increase the average daily production of milk from 39,200, Madras Measures to 59,780 Madras Measures by the end of the plan period. The production has been increased to 43,643 Madras Measures per day by the end of the first year of the Plan. The Milk Supply Co-operative Society at Kodaikanal, has installed a pasteurisation plant at a cost of Rs. 32,000 with necessary financial assistance from Government, and proposals are under consideration for the establishment of a big plant at Coimbatore at a total cost of Rs. 10·36 lakhs. For the improvement of cattle wealth, the establishment of four Co-operative Salvage forms and the organisation of 11 Cattle Breeding Societies have also been provided for in the Plan. One salvage farm at Thuvakudy, in Tiruchirappalli district, has already been established and arrangements for establishing another salvage farm at Abishekappatti in the Tirunelveli district are in progress. Two cattle breeding societies have been started at Semmanangur in the South Arcot district and Appanayappanpalayam in Coimbatore district and two more cattle breeding societies will be formed very soon, one at Beemakulam in the North Arcot district and the other at Uthiramerur in the Chingleput district.

Development of Handloom Industry.

Next to agriculture, the handloom Industry occupies an important place in the rural economy. Madras has about five lakhs of looms which provide employment to a large number of rural families. The industry which received a set-back sometime ago on account of unfavourable market conditions and the keen competitions from the Mills has been rehabilitated considerably, thanks to the liberal assistance provided by the Government of India under the Cess Fund Scheme. The Co-operatives afford a convenient and effective agency to the Central and State Governments for the implementation of the various ameliorative schemes connected with the resuscitation of the handloom weavers. At the end of 1955-56, there were 842 weavers' co-operatives with 1·57 lakhs of looms in their fold. The production in the societies has nearly

doubled itself to about Rs. 647 lakhs and the sales also increased from 488·12 lakhs to Rs. 589·22 lakhs. Several schemes have been drawn up and included in the Second Five-Year Plan for the development of the Industry. The objectives of these schemes are to bring in more than 50 per cent of the looms into the co-operative fold by giving interest-free advances to the weavers to take shares in societies and by providing working capital to the societies through the co-operative financing banks, to establish housing colonies for weavers, to organize industrial co-operatives for their benefit and to improve the technique of production by establishing pattern-making factories and undertaking research in improved appliances. The sanction of rebate on sales of handloom cloth with a view to promote marketing is also a major item in the development scheme. Up to 31st March 1957, 30,238 looms were enrolled into the weavers co-operatives and Rs. 68·70 lakhs were provided for issue of share capital and working capital loans. Nine housing colonies for weavers have been sanctioned by Government. These colonies are estimated to cost Rs. 42·12 lakhs and will consist of 978 houses. A colony will normally have 100 houses and provide necessary amenities to the weavers. Active steps have been taken to expedite the completion of the colonies. During 1956–57, 3,941 improved appliances were purchased and supplied to primary Weavers Co-operative Societies and the State Handloom Weavers Co-operative Society at Madras. A sum of Rs. 105 lakhs was spent towards rebate on the sale of handloom cloth. Twenty depots were opened by the Madras State Handloom Weavers Co-operative Society during the year and there are now 264 selling units all over the State. The Society has also opened emporia for the sale of co-operative handloom fabric outside the Madras State in this country and in the foreign countries as well. This ancient industry of our State is making steady progress under the auspices of the weavers co-operative organisations.

Housing.

With the increase in the population, the problem of housing has been acutely felt not only in the urban and semi-urban area, but in the rural parts as well. At the end of June 1956, there were 139 ordinary building societies, 39 house building societies, 10 house construction societies, 3 industrial housing societies, 1 co-operative Township and 2 co-operative tenancy societies. 7,121 houses of all types have been constructed by these societies since their inception. In addition to the urban housing societies and the industrial housing societies, there were 69 rural housing societies, with a membership of 1,534 and a share capital of Rs. 1·59 lakhs. 30 houses have been constructed by these societies. During 1956–57, loans to the extent of Rs. 51·14 lakhs were given under the urban housing scheme. 31 new societies were registered and 653 houses were constructed. During the current year, 4 societies are proposed to be formed and 500 houses are expected to be constructed. 3 housing societies for Industrial Workers, one at Peelamedu in the Coimbatore district, another at Sivakasi in Ramanathapuram district and the third at Koilpatti in the Tirunelveli district have been formed and the first of these societies has been sanctioned loan and subsidy to the extent of Rs. 3·23 lakhs for putting up 144 tenements for its members who are mill workers at a total cost of Rs. 6·92 lakhs. The proposals of the other two societies are awaiting sanction. One more society at Nellikuppam has since been registered and another society at Dalmiyapuram in Tiruchirappalli district will also be started soon.

Co-operative Education and Training.

The provision of adequate facilities for the training of the co-operative personnel, both official and non-official, is of utmost importance in any scheme of development of the co-operative movement and of carrying the message of co-operation to the length and breadth of the country. In the Madras State, there is a Central Co-operative Institute in Madras for the training of candidates recruited for the Department and there are three co-operative training institutes at Coimbatore, Tanjore and Madurai for the training of non-official employees. The proposal to run higher courses of training in the Central Co-operative Institute and to upgrade it into a Co-operative Training College is still under consideration. The need for training has become more and more urgent in view of the growing complexity of the movement. The need for imparting co-operative training to the members and office-bearers of co-operative societies has also been realised and a scheme drawn up by the All-India Co-operative Union is now being implemented in this State. Under this scheme, 1,000 members and 200 panchayatdars will be given training at 40 centres.

Co-operation and Community Development Programme.

The Co-operative Movement is making rapid strides in the Community Development and National Extension Service areas, where concerted efforts are under way to co-ordinate the economic activities of the co-operatives with the Community Development programmes. The major scheme of co-operative development, viz., in the sphere of credit, marketing, milk supply and housing are now being intensively implemented in these Community Development and National Extension Service areas. A heavy programme of organisation of more credit co-operatives, milk supply societies, weavers societies, housing societies, etc., is carried on in these areas with the help of the Extension Staff. Till the end of July 1957, there were 3,923 co-operative credit societies in the Community Development and National Extension Service blocks covering 5,039 out of 6,265 villages and serving 18·3 per cent of the rural population. To promote co-operative development in these areas on a scientific and planned basis, the Government have ordered the upgrading of the post of the Senior Inspector Extension Officers in the Blocks into those of Co-operative Sub-Registrars. In order to make the village level workers play a more effective role in implementing the co-operative development programme in the block areas, a proposal to impart them practical training in co-operative work is under consideration.

Conclusion.

Co-operation has thus a very significant role to play in the building up of our country. The centre and the State Governments are giving increased attention for the spread of this movement particularly as a part of the Community Development Programme. Our Prime Minister has, on more than one occasion, expressed categorically that, if there is one subject more than another which requires an enthusiastic approach, full of faith and a crusading zeal, it is Co-operation and that the socialist pattern of society which we want to build is intimately related to Co-operation in various fields. If the principle of Co-operation should govern

(*Continued on page* 36)

In the Foot Steps of Mahatma . . .

Development of Cottage Industries on Unprecedented Scale

By Sri T. K. PALANIAPPAN, I.A.S., Director of Industries and Commerce.

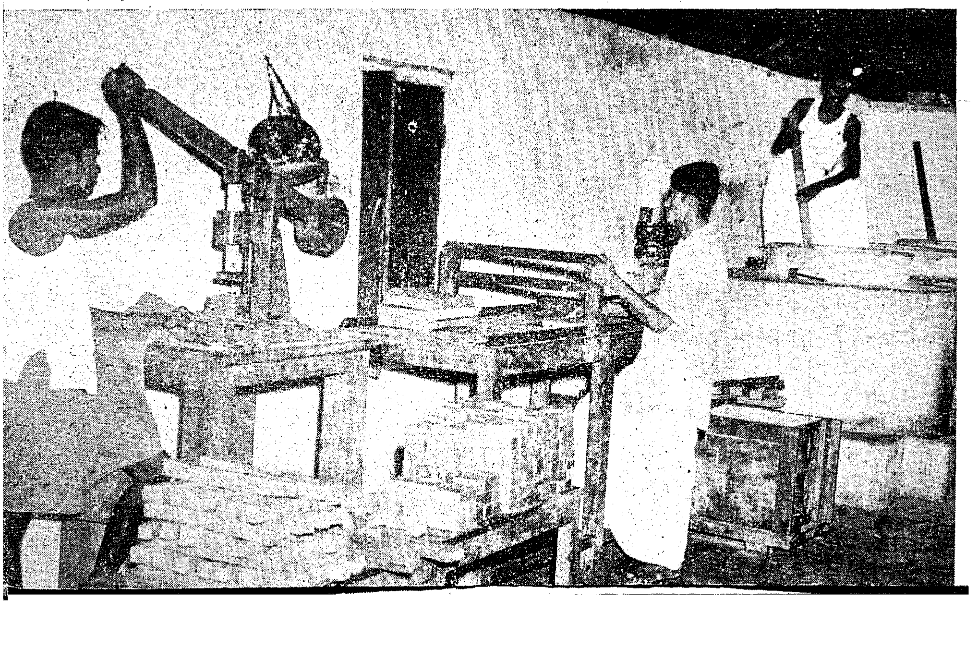
Saint, Savant, and Saviour of India as he was, the Mahatma was no less an Industrial Economist.

" Are you against large-scale production?" was the question that was darted at him by a group of Western economists 20 years ago.

" I never said that. This belief is one of the many superstitions about me. What I am against is the large scale production of things that the villagers can produce without difficulty . . . Villages must become self-sufficient. It is beneath human dignity to lose individuality and become a mere cog in the machine. I want every individual to become a full blooded, fully developed member of society." These were the words of wisdom that dropped from the lips of Gandhiji whose birthday we are celebrating this week. His inspiring message showed the path to freedom and the way for every individual to have a self reliant existence in a free society. His unerring instinct laid emphasis on the development of village and cottage industries, which alone can give opportunities for employment to the millions wholly or partially unemployed in this vast agricultural country of ours. His programme envisaged not only the provision for employment but also the production within the villages of the barest necessities of life to the millions.

Village industries are those that meet the daily requirements of every household. They are the village oil industry, hand-pounding of paddy, village tanning, village pottery, flaying and bone crushing, palmgur, bee-keeping, cottage match industry, soap making from non-edible oils, gur and khansari, hand-made paper, carpentry and blacksmi hy, etc. Under the Second Five-Year Plan a sum of Rs. 55 crores has been set apart for the Khadi and Village Industries in the country. In our State the Plan provides a sum of Rs. 218 lakhs for village industries excluding Khadi. One hundred and sixty-two units costing about Rs. 40 lakhs have so far been sanctioned for the development of village industries, most of them being located in the National Extension Service and Community Development Blocks where an integrated development of the rural areas is being attempted. The implementation of several schemes under village industries is expected to provide full-time employment to 1,910 persons and part-time employment to 53,900 persons.

Soap making at T. Kallupatti. Soap making is becoming a popular proposition in the countryside also.



Large scale development of handicrafts

The development of the small-scale handicrafts, village and cottage industries is being attempted perhaps for the first time on such an enormous scale covering such a large number of villages. This type of activity is also new to the Government and hence has to be developed with great care and fore thought. To study these aspects and gain experience, a pilot project for development of cottage industries covering six Blocks in the Lower Bhavani area has been started. The Pilot Project will in addition to intensifying the development of cottage industries in that area, also make a study of all cottage industries and find out the best method of co-ordinating them. It is just a year since the Pilot Project started functioning. A detailed survey of the possibilities of the area in respect of the development of cottage industries has already been undertaken and what is known as a long range programme is under preparation. Meanwhile as an immediate programme a number of schemes at an expenditure of Rs. 4,89,730 have been sanctioned and are under implementation. This will give

full-time employment to 160 persons and part-time employment to 215 persons in the Pilot Project area.

One Central Workshop for manufacturing metallic parts for the Ambar Charka and six units (Saranjam Karyalayas) for manufacturing the wooden parts and assembling the charkas at a total cost of Rs. 20 lakhs and with production capacity of 12,000 Ambar charkas per year are being set up. The Central workshop and one Saranjam Karyalaya will be located in the Industrial Estate, Guindy and the other Saranjam Karyalayas at Pettai near Tirunelveli, Tiruchirappalli, Tirupur, Vadalur and S.V. Nagaram near Arni. The Saranjam Karyalaya at Madras has already started production.

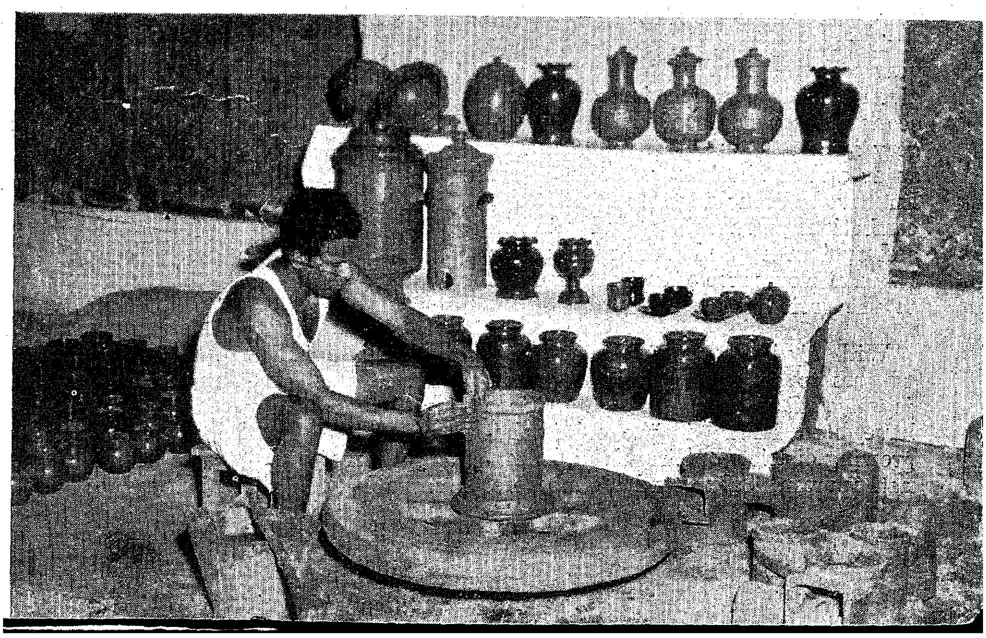
Village and Cottage Industrial Co-operatives.

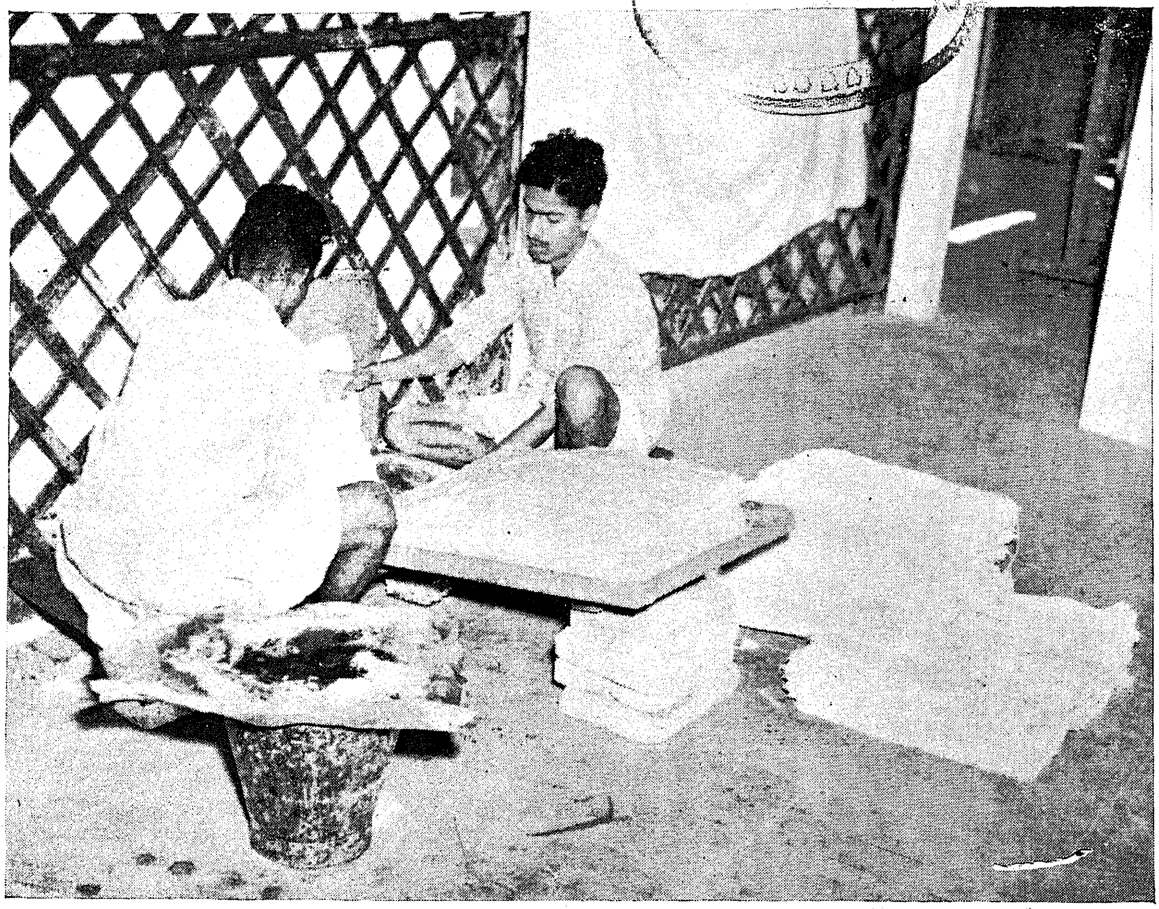
The village artisan or worker is too backward and poor to stand on his own legs, to carry on his production unaided and to market his products at favourable prices. For lack of organisation he is at present obliged to depend on rapacious money-lenders and middlemen traders who exploit them to the utmost with the result the artisans and workers get deeper and deeper into debts. It is an impossible task to assist individually the innumerable village artisans and unemployed rural workers except through a proper organisation which will ensure regular work for them, supply of raw materials needed for their industry at reasonable prices, technical advice and guidance, a ready sale for their products at good prices and enough return for their labour. An industrial co-operative where the actual workers are shareholders and where they would be enabled to reap the full benefits of their labour, and facilities for economic production and advantageous marketing could be provided, is the only organisation that can deliver the goods. It eliminates the middleman and the capitalist and is a positive step towards the attainment of socialistic society which is the declared objective of the Second Five-Year Plan. The industrial co-operative gives the worker the feeling of ownership in the industry and of reaping the full benefits of his work, which enthuses him to put forth his best. Therefore, the development of the village and cottage industries is attempted through the formation of industrial co-operatives. In the first place, the workers and artisans are given share capital loans for becoming members of industrial co-operatives. These societies are given loans towards working capital and grants towards Reserve Fund to increase their borrowing power, subsidies for meeting the establishment charges, exemption from levy of sales tax for their products, and rebate on sales or production in respect of ghani oil, pottery and handpounding of rice. Financial assistance is also given for the purchase of site, construction of worksheds, opening of sales depots for participating in exhibitions and for other activities intended to promote marketing of their products. Adoption of improved technique in methods of production and the introduction of improved equipment are of paramount importance for the economic survival of village and cottage industries. To make village industries more paying and the work of the artisans less arduous, a newtype of wooden or stone chakkies for paddy husking, improved potters' wheels with ball bearings, single bullock driven oil ghanis with ball bearings, hand-driven centrifugal machines for manufacture of palm or khandasari sugar, improved looms and reeds for mat weaving, and better and more efficient types of charkas for coir industry are supplied to the members of industrial co-operatives at half cost, which is also treated as loan and recovered in easy instalments. Technical guidance and advice are also given to the members by the technical experts periodically. These societies are assisted in the disposal of their products by giving preference to them in making purchases for Government requirements. During the last year and a half, after the societies came under the control of the Industries Department from the Co-operative Department as many as 150 industrial co-operatives for various village industries like hand-pounding of paddy, village ghani oil, pottery, brick making, soap making, tannery, footwear, and leather goods manufacture, carpentry, metalware industry, match industry, mat weaving, basket making, coir and yarn rope industries, palm products and handicrafts have been formed. The Pattamadai Fine mats, the Tanjore Musical instruments like Veena, Thambura, etc., the Modaiyur stone images, the Mahalipatti ropes, Cuddalore toys are some of the special items for which industrial co-operative societies have been formed on the Handicrafts side. The total number of societies of all types has risen from 138 to 288 with 19,594 members and a paid-up share capital of Rs. 3.36 lakhs. These societies have recorded a production of goods worth Rs. 25 lakhs in 1956–57 as against a production of Rs. 13 lakhs during 1955–56. Industrial co-operative societies solely for the benefit of the Harijans have also been formed with the assistence of the special grants received from the Government of India for the uplift of Scheduled Castes.

Employment of ex-toddy tappers

The rehabilitation of the ex-toddy tappers thrown out of employment by the introduction of prohibition

Pottery making as a cottage industry receives every encouragement under the Industrial Co-operative Scheme.





Hand-made paper is found more suitable and durable for certain type of printing.

presented a serious problem to the administration. This has been solved by organising palmgur industry through 1,430 industrial co-operatives thereby providing employment to as many as 1.6 lakhs of ex-toddy tappers. These palmgur societies have been making steady progress from year to year and their annual production of jaggery has now risen to 25 lakhs of maunds. With a view to augment their income, every year a large number of tappers are given training in the improved and economical methods of producing jaggery and in the manufacturing of whit sugar and confectionery from jaggery. Improved gur making sets at half cost, confectionery machines and utensils and equipment needed for running the Neera Parlours free of cost are supplied to the societies.

With a view to assist the ex-toddy tappers to get a good price for their jaggery, four marketing federations have been formed in the chief palm-growing districts of Tirunelveli, Ramanathapuram, Salem and Coimbatore. To further assist these organisations in co-ordinating their activities and in arranging for marketing of jaggery outside the State and the country, a State Marketing Federation has recently been formed.

The problem of village and cottage industries is essentially the problem of marketing. All the assistance given by Government to these village and cottage industrial co-operatives will not, by themselves, be sufficient to foster and sustain them. The future of the millions engaged in these village and cottage industries will depend to a very large extent on the public patronising their products.

Handicrafts.

The handicrafts of South India are known all over the world for their perfection of form, colour, harmony, balance, and rhythm and above all for their maturity and refinement of expression. They flowered and thrived as the material expression of a remarkable culture which valued and fostered the fullest and highest development of man's individual personality. A great cultural tradition going back to the very dawn of History when the drama of human life itself began to be first unfolded and rich in music and dance and poetry, philosophy and religion inspired the craftsmen to compose exquisite poems in stone and metal expressing some of the noblest and finest thoughts the mind and the spirit of man could conceive. The craftsman was essentially an artist; the cloth he wove, the image he chiselled, the pottery he moulded were created out of the joy of giving shape and form to dreams and inspirations.

The advent of the machine age and the influence of the values of the new industrial society ushered in new and powerful forces the impact of which was devastating in its effect on handicrafts. The emphasis shifted from cultural to material values, from beauty to utility, from authenticity of form and durability to cheap imitation and greater variety. Many of the craftsmen went to

the wall unable to meet the unequal competition with the machine. The loud machine stilled his small voice. A few craftsmen, however, managed to keep up the tradition in their own humble way in the remote corners of the country, working in dark hovels with modest and unostentatious tools producing against heavy odds the cultural treasures otherwise known as handicrafts.

Sentiments of traditionalism alone cannot carry us far, any more than exhortations and revivalistic incantations can, in rehabilitating our handicrafts. Although the esoteric nature of Indian handicrafts is one of their main attractions, nevertheless, customers increasingly demand adherence to some aesthetic standards which many of our present day craftsmen seem to ignore. We have very highly developed traditional forms which are excellent from the aesthatic point of view and are also of utility value. There are also handicrafts which are aesthatically quite good but nevertheless do not sell in the modern market as they do not fit into modern usages. They have to be redesigned to be made usable adapting them to modern needs and conditions without destroying their basic charm and essential spirit. Till recently the craftsmen have had hardly any guidance in this direction. Many of them are not aware of the trends in design and are very often completely lost. Proper guidance and assistance in this vital field is therefore of tremendous importance.

Easy credit facilities

The modern demand is for beauty as a supplement to usefulness and at a price which the common man could afford. Hence if our handicrafts are to occupy a permanent and important place in the future of the country a radical improvement has to be immediately effected in every aspect of production like material utilization, tools and technique employed, designing, finishing, etc., so as to produce newer and better articles at cheaper and competitive prices. Then there are also the other basic problems like providing easy credit, arranging for efficient marketing service and most important of all creating a suitable organisation of the craftsmen through whom the various developmental measures to promote handicrafts could be channelized and made effective. Realising as they do these complex problems facing handicrafts the Government are taking vigorous steps through the establishment of several training, service, design, research and production centres for tackling them and for promoting the proper development of handicrafts. A net-work of emporia and procurement-*cum*-sales depots for providing efficient marketing service is also being established. The provisions of the State aid to Industries Act have been liberalized with a view to provide credit on easy terms to the craftsmen. A sum of Rs. 55·5 lakhs has been provided in the Second Five-Year Plan for the development of handicrafts in this State. So far forty-one schemes costing Rs. 25·62 lakhs have been sanctioned for the promotion of handicrafts covering a wide range from sculpture and art metal work to toys and embroidery.

Sculpture has always occupied pride of place in the arts and crafts of South India. Patronised by Kings, encouraged by an enlightened community and inspired by faith in a living religion our ancient sculptures have produced marvels unsurpassed for their beauty and delicacy. Lack of patronage during the recent years by an unsympathetic foreign rule, has adversely affected this craft and the majority of the workers have deteriorated into ordinary stone breakers and dressers. With a view to reviving this ancient art craft and providing trained workers for renovation of temples, etc., a Training Centre has been established at Mahabalipuram. Ten candidates are undergoing intensive training in the principles and practice of sculpture in accordance with the formulæ and regulations contained in our ancient literature. Experienced Sthapathis versed in Shilpa sasthra are in charge of the training programme.

The allied craft of art metal work has comparatively speaking, not suffered so badly. But still it has lost much of the skill and beauty that characterised the work of ancient masters. The processes of casting, polishing, etc., adopted at even chief centres like Swamimalai are crude and out of date resulting in poor quality and finish and considerable waste. With a view to develop the industry on proper lines and provide servicing facilities like improved casting, better finishing, etc., as also guide the artisans in the selection and use of good designs, a training-*cum*-service centre has been started at Swamimalai. Twenty candidates are undergoing specialized training here in the art and science of art metal work. A similar centre has been establihsed at Nachiarkoil for Bell-metal work.

Musical instruments

Manufacture of musical instruments, particularly Veena, has been a speciality of Tanjore handicraftsmen. A co-operative society for the manufacture of musical instruments is functioning at Tanjore. A few independent craftsmen are also manufacturing these instruments at Tanjore, Narasingampettai, Kovilpatti and Madras. With a view to organise and develop the industry on scientific lines a Training Centre for the manufacture of various concert instruments including musical instruments used in temple rituals has been started at Madras by the All-India Handicrafts Board.

Art pottery of a very high standard was being produced in South India. Some of the pottery found in the ancient cairns and cromlechs are of excellent shape and finish and far excel any of the same class made in India to-day. Articles were being made in a variety of attractive shapes and incised with charming linear patterns. This kind of pottery has now become a lost art. But at Karigiri in North Arcot district several kinds of vases and other articles with a pretty green glaze are being made for the last few decades. The glazed pottery of Karigiri are admired, for their grace of line and dignified hues and have won appreciation at the Wembly Exhibition and at various continental exhibitions. A comprehensive scheme for the development of this industry has been taken up. The potters of Karigiri have been assisted to organise themselves into a co-operative society. A modern kiln facilitating greater control of firing operations and providing higher and more uniform distribution of temperature with low operating cost has been constructed at Government cost for the common use of the potters. The free services of a kiln operative have also been sanctioned. A research centre for studying the various problems facing the industry has been set up at Gudur. The Centre has started on a systematic study of the clay and glazes used by the potters and have already standardised a suitable body. It is much stronger, more vetrified and less porous and is a great improvement

on the type of low fired porous body that is being used by the potters. Different coloured glazes like deep yellow, blue, chocolate, green and black, have been tested and standardized. Several new items like ash trays, jars, vases, toys, etc., in pleasing shapes have also been designed. Schemes for the development of glazed pottery industry at Manamadurai-Vridhachalam places are under consideration of Government.

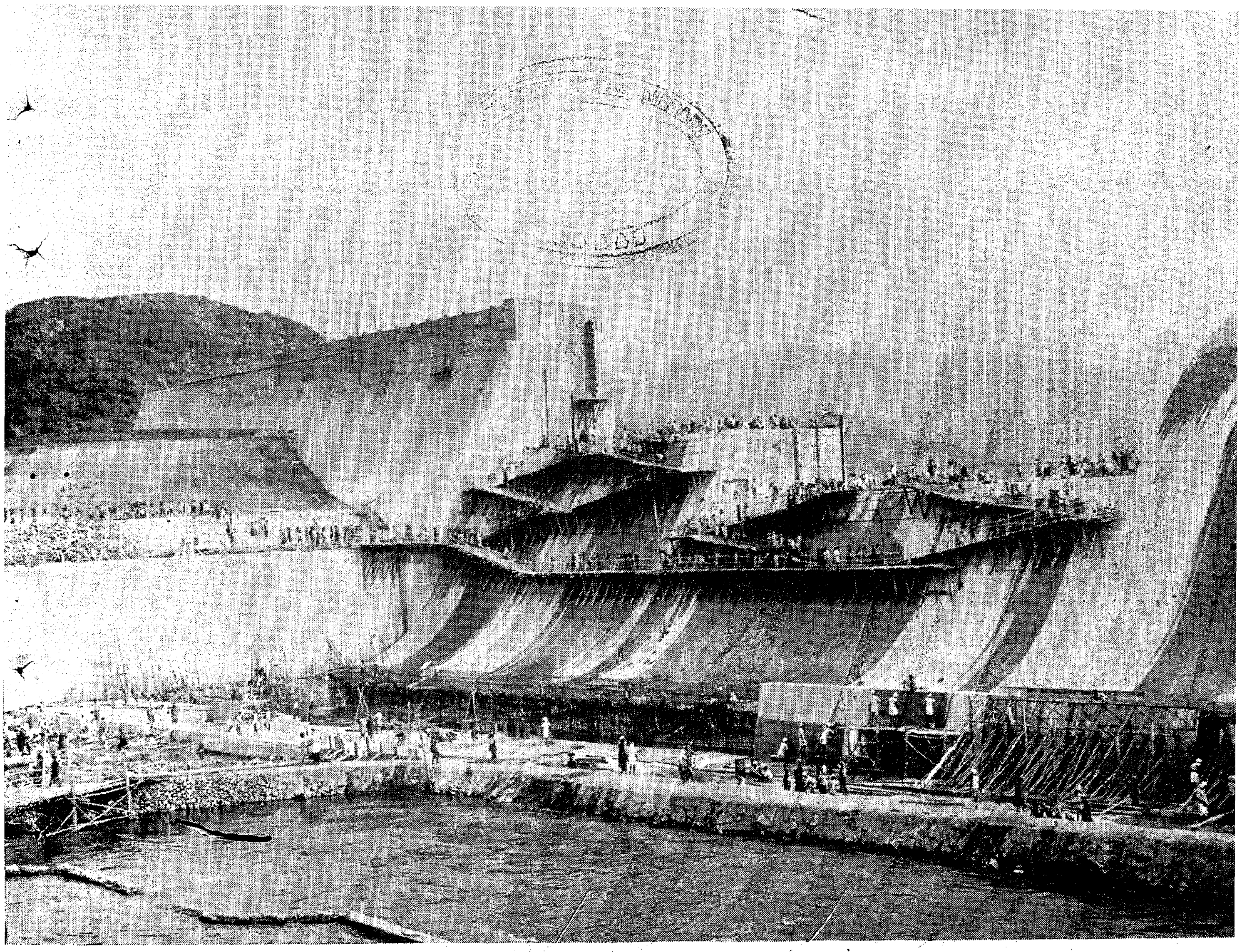
The hand woven and hand printed textiles of South India have been famous from time immemorial for their wispy delicate texture, their vibrant yet subtle blending of colour and their endless variety of designs. Yet there is considerable scope for further improvement in the adoption of ancient art forms and symbols, redesigning them for modern requirements as summer dresses, beach costumes and skirts, curtains, bedspreads, etc. A Pilot Centre to revive and popularize ancient traditional designs has been started at Kancheepuram. A laboratory for the standardization of vegetable dyes and dye processes with a view to revive the use of the soft and mellow traditional Indian shades in the place of the harsh cold chemical dyes that have replaced them has been established by the All-India Handicrafts Board at Kalakshetra. A Training-*cum*-Service Centre for hand printing of textiles and mats has also been started by the Industries Department at Rajapalayam. The opening of a few more centres including one for tie and dye is under the consideration of Government.

Drugget Industry

Closely allied to the cotton fabrics industry is the woollen carpet or drugget industry. In normal years about 600,000 sq.yds of druggets valued at Rs. 30 lakhs are being exported from South India. The charm of the druggets lies in the pleasing colours and attractive designs used. Though various colours are used, the ones most popular are the soft creamy white, light green, cool low blue, pleasing orange, bright rose and the full Indian red. The beauty of these colours is greatly enhanced by judicious use of oriental floral patterns. The industry has of late been facing a critical situation due mainly to the scarcity and high cost of wool and sharp trade practices. To meet the above situation and to improve and control quality, a scheme for the establishment of a wool processing centre at Vinnamangalam for the supply of standard processed wool at reasonable prices to the drugget weavers has been sanctioned at a cost of Rs. 13.20 lakhs. The building of the factory is under construction and it is expected to go into production shortly. Steps to control quality by prescribing standards and banning exports that do not conform to specifications have also been taken up. Suitable legislative measures for controlling production and supply of wool is also under consideration. A Centre for training in improved methods of druggets weaving and in the use of more characteristic and pleasing Indian designs has been

(*Continued on page* 22)

Cutting bangles from chanks calls for considerable skill.



Amaravathi Nearing Completion

18,000 Acres to Get Assured Water-Supply

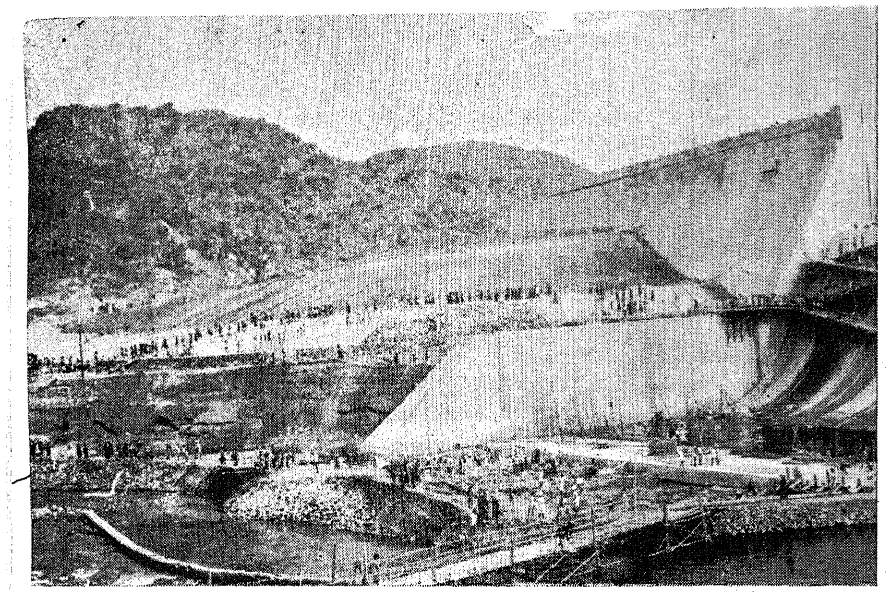
Udumalpet and Dharapuram taluk of Coimbatore District will no more depend on the vagaries of monsoon. The Rupees three-crore Amaravathi Project designed to give assured water supply to these two taluks is nearing completion and the main canal of the Project is to be opened for irrigation shortly. The Canal Works are also almost complete.

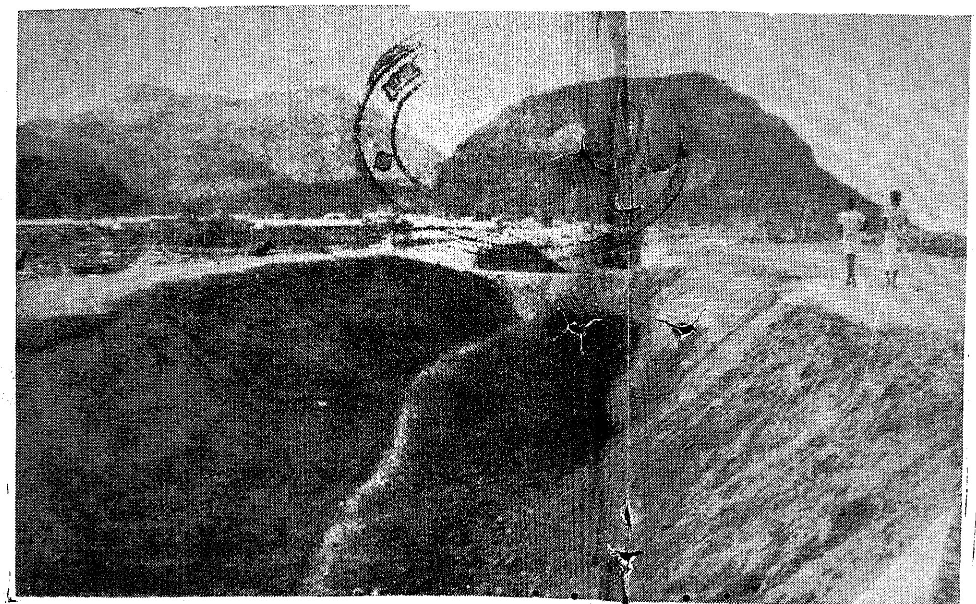
The 39-mile canal will irrigate 11,823 acres in 18 villages—14 in Udumalpet Taluk and 4 in Dharapuram Taluk—of Coimbatore District. Only irrigated dry crops are to be grown in the area. But sugarcane will be permitted to be raised over an extent not exceeding 2,000 acres in the area that may be localized for this purpose. The villages to receive the Amaravathi waters are Andigoundanur, Elayamuthur, Komaralingam West, Komaralingam East, Agraharakannadiputhur, Sarkar Kannadiputhur, Pappankulam, Maivadi Zamin, Vedappatti Zamin, Solamadevi, Jothampatti Zamin, Thungavi, Metrathi Zamin, Karatholuvu, Ponnapuram, Chinnakkappalayam, Puthur and Dalavaipatnam.

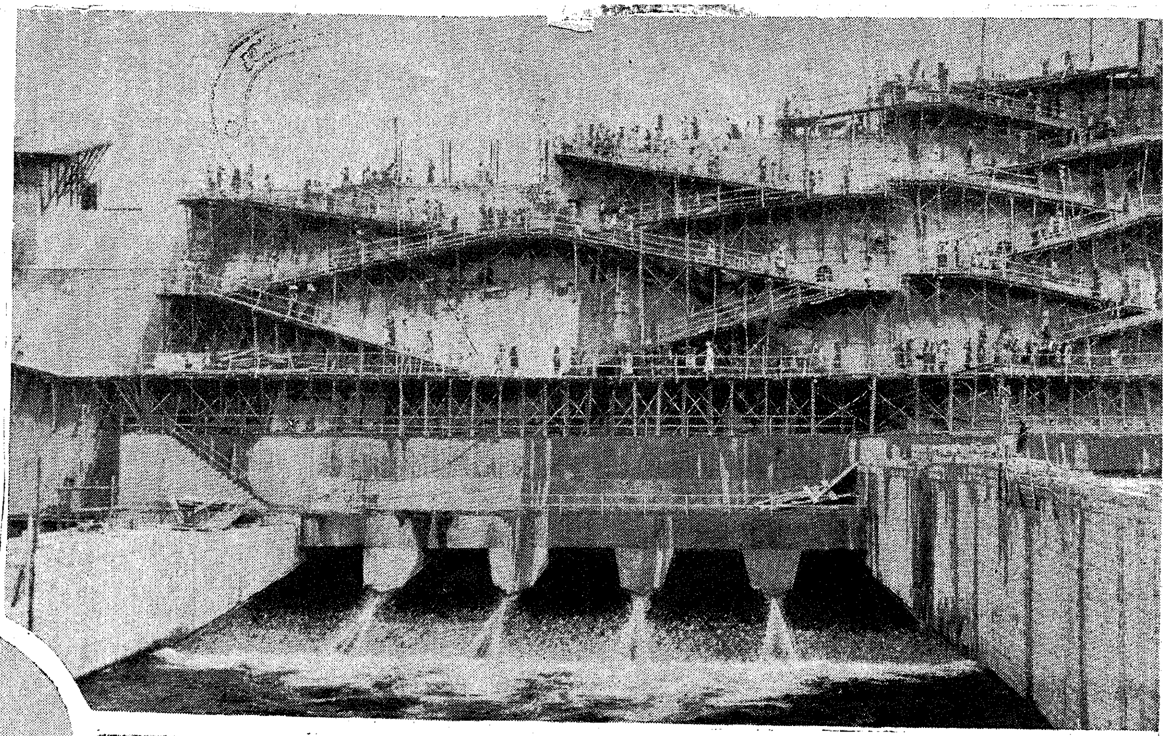
The Dharapuram and Udumalpe taluks of Coimbatore district have been frequently ravaged by famine as a result of the continuous failure of monsoons. In the past, the Government have met the terrors of famine by starting relief works and on this account not less than Rs. 20 lakhs were spent in 1939. The Government therefore decided to plan an irrigation project in this area and the Amaravathi Project was inaugurated in December 1953.

The river Amaravathi, which rises in the Western Ghats, is a major tributary

(*Continued on page 22*)







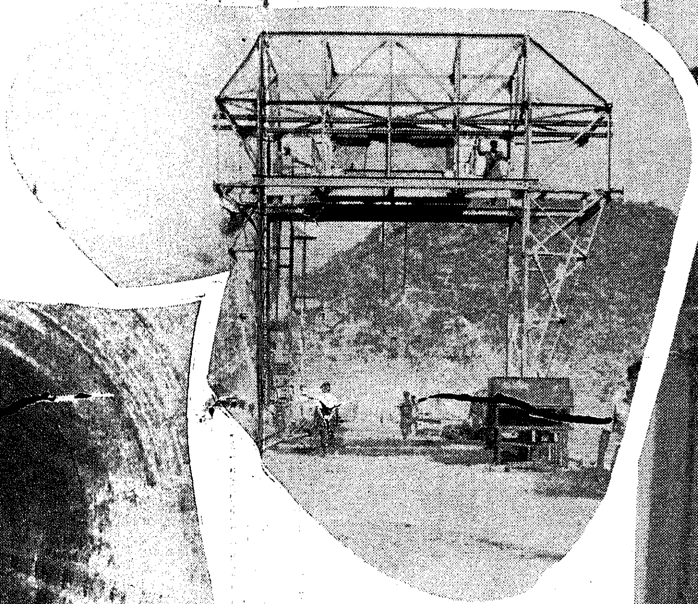
Amaravathi . . .

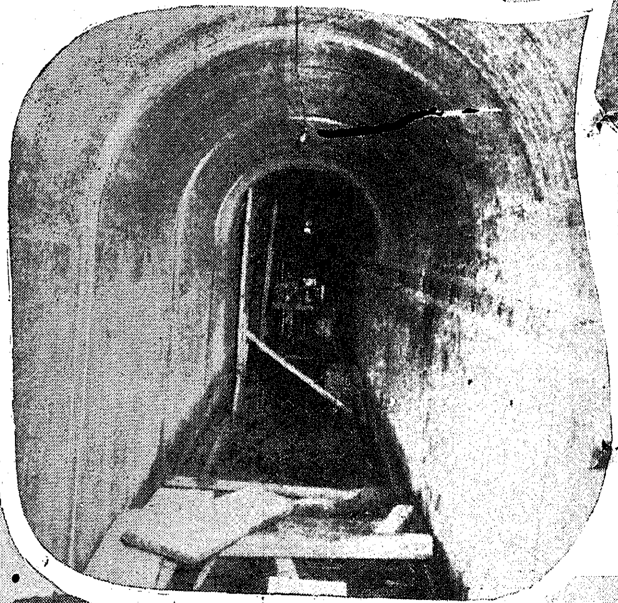
These pictures show the progress made in putting Amaravathi Project on the map of Madras State. This three crore rupees Project is nearing completion and waters will be let out for cultivation shortly.

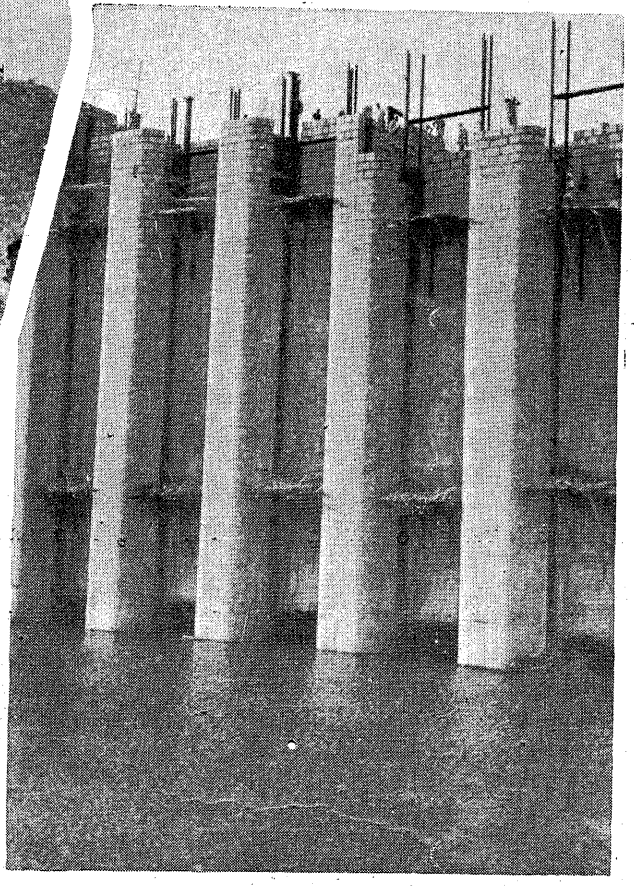
A panoramic view of the earthen dam on the left side, mudworks of a canal under construction and the left main canal are given in the top strip.

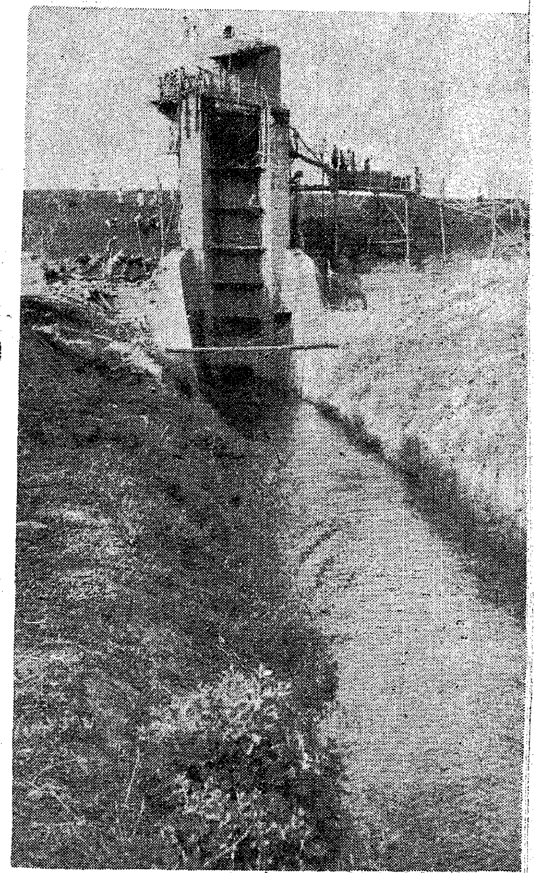
A beautiful garden springing in the foreground of the earthen dam and the sons and daughters of the soil toiling day and night to put finishing touches to the Reservoir are seen in the bottom strip.

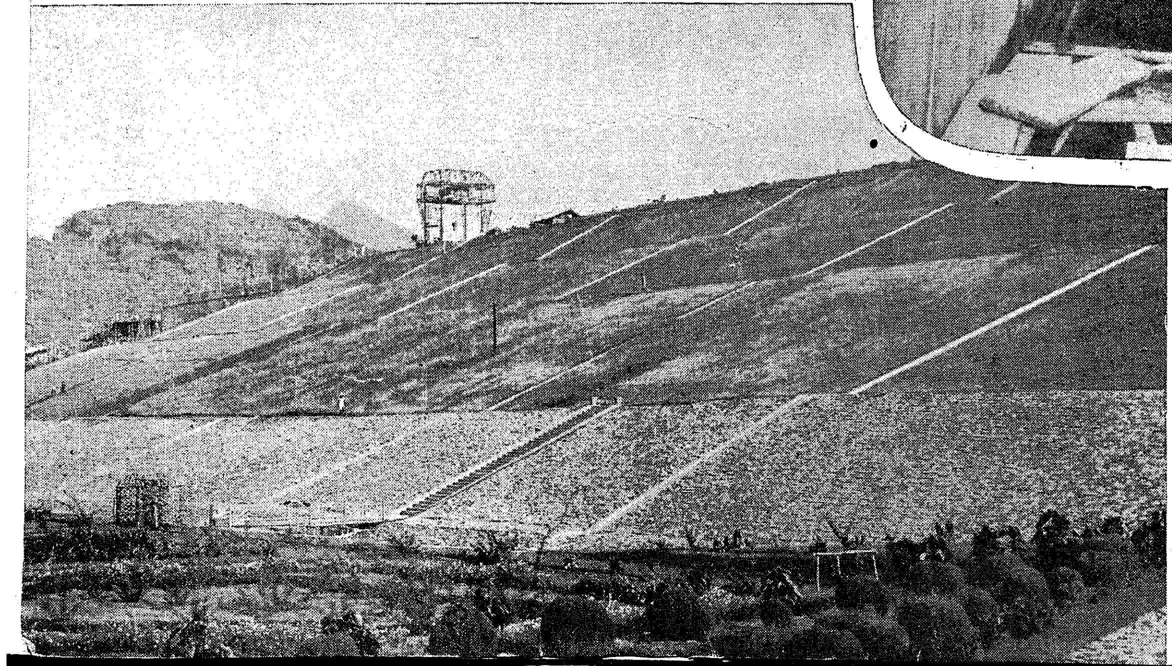
Sluices under construction and a diversion canal are shown in the centre. The insets give an idea of the seepage tunnel (inspection gallery) and the giant crane employed.

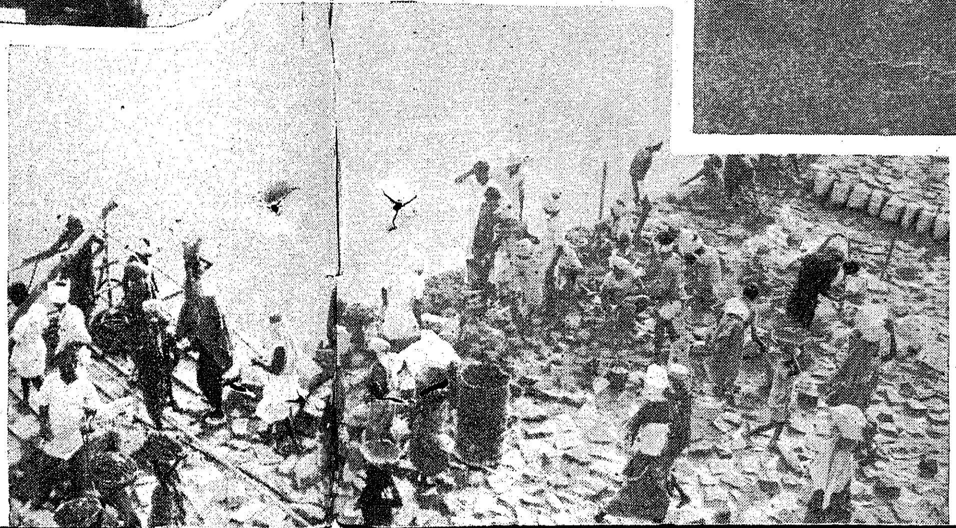


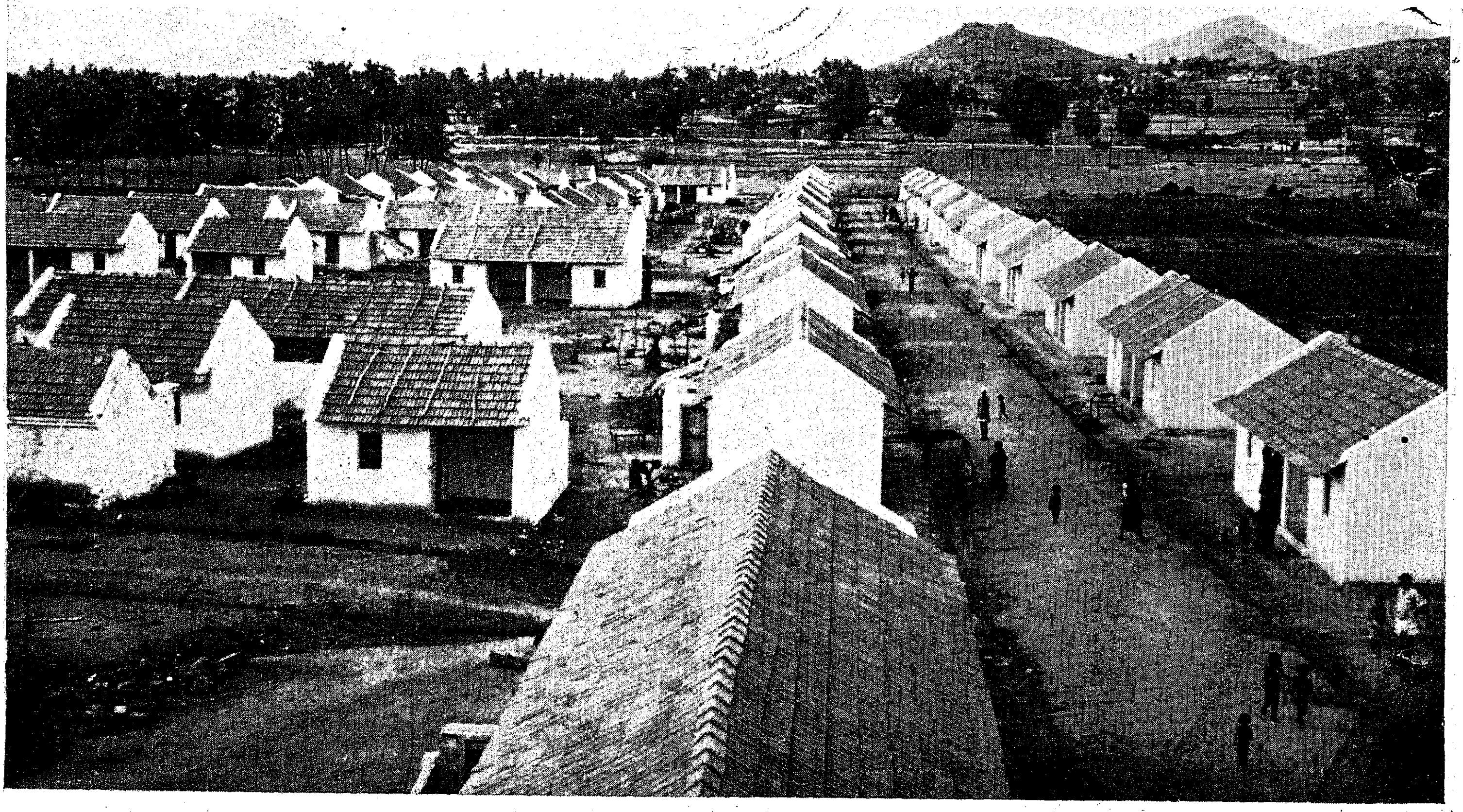












Impressive Achievement in

Housing the Harijans

By Sri A. SOMASUNDARAM, Assistant Secretary to Government, Industries, Labour and Co-operation.

Next in importance to food is shelter for any human being and the one community which awefully lacks this basic need are the Harijans of the State. Accustomed to live for centturies practically under serfdom, the Harijans have not thought of owning anything for themselves. They lived huddled together in hovel-like shelters that had been made available to them by their landlords. Consequently they were always under power of coercion by the landlords which had been at times ruthlessly exercised. It had therefore become the endeavour of the Government to provide free of cost house-sites to the Harijans.

Government lands if available, are transferred to "Village Site" and assigned in plots to those who need them. But as suitable Government vacant lands are limited in extent, the Government have often to acquire large extent of private lands under the Land Acquisition Act by paying compensation.

House-sites free of cost.

Prior to 1936, the Government were granting loans recoverable in easy instalments to the Harijans for the purchase of house-sites acquired on their behalf. Since 1936 the Government have been showing special concessions by bearing the entire cost of the land required for communal and common purposes and half the cost of land covered by house-sites to the Harijans subject to the maximum of Rs. 150 per acre in the case of dry lands and Rs. 350 per acre in the case of wet lands. Since 1949, the Government have liberalised these concessions. House-sites are now given free of cost to all Harijans who do not own any, except in cases where they can afford to pay the cost. Each family is ordinarily assigned an extent of 3 cents in wet areas and 5 cents in dry areas. This extent is exclusive of the land required for the provision of common places like streets, pathways, etc., for which, as in the past, the Government bear the full cost. Till July 1956, the scheme for acquisition of house-sites for the Harijans was in operation only in rural areas. Subsequently the scheme was extended to Class I Panchayats. The Government have since decided to extend the

scheme to municipal areas as well with a view mainly to remove insanitary pockets of Harijan colonies in the urban areas.

Where the Harijans have occupied Government poramboke lands by construction of houses, such lands are assigned to them if they are not objectionable. Even when the occupation is objectionable, eviction of the Harijan occupants is usually deferred until alternative sites are provided for them.

Seventy thousand sites assigned.

The Government have assigned up to end of 1956–57 from lands at their disposal about 70,000 house-sites. They have acquired private lands for providing about 80,000 house-sites up to end of 1956–57 at an estimated cost of about Rs. 58 lakhs.

The mere provision of house-sites did not solve the problem of 'Housing' for Harijans. They had no sufficient resources to put up decent houses of their own, with the result that most of the house-sites so assigned were either left vacant or ill-ventilated and shabbily thatched huts were put up in these sites. The State and the Union Governments seriously thought of providing houses for the Harijans, when the Planning Commission drew up the Second Five-Year Plan. Under the State Sector, out of a total provision of Rs. 497·81 lakhs made by the Planning Commission for Schemes relating to the 'Amelioration of the Backward Classes' for this State, a sum of Rs. 75·45 lakhs has been set apart for the Housing Schemes for Harijans for the entire Plan period on a phased programme at the rate of Rs. 15·09 lakhs per year. The expenditure is shared equally by the State and the Union Governments. In 1956–57, a sum of Rs. 13·35 lakhs was spent towards construction of 2,513 houses. The Government have approved a type design to be followed generally for putting up houses under the scheme with such modifications as may be found necessary to suit local conditions. The cost of construction of each house is estimated at Rs. 750 of which the Government give a free grant of Rs. 550 by way of materials and the balance of Rs. 200 is met by the beneficiaries by way of free labour, etc. The cost of construction has however been increased in the Nilgiris district due to special climatic and physical features to Rs. 1,000 per house to be made up of the Government subsidy of Rs. 700 and labour charges costing Rs. 300 met by the beneficiaries. In cases where the beneficiaries are too poor to constribute free labour, the Government give interest-free loan repayable in easy instalments to meet the cost of labour. In order to prevent the houses from being passed on by the beneficiaries to persons for whom they are not intended, an agreement is got executed by the Government from every grantee against such alienation.

Grant-in-aid schemes.

Under the Central Sector of the Second Five-Year Plan, the Government of India have volunteered to sponsor 'Housing' schemes for the benefit of the Harijans to the tune of Rs. 15 lakhs for the Plan period and have agreed to meet the entire cost. During 1956–57, a sum of Rs. 2·24 lakhs was spent for the construction of 378 houses. The pattern of assistance given to the beneficiaries and the type design adopted for the scheme under the Central Sector are more or less the same as those adopted for the grant-in-aid schemes of the State sector. The Government have programmed to construct 615 houses at a total cost of Rs. 3·38 lakhs during 1957–58.

Harijan colonies for purposes of construction of houses will ordinarily be selected so as to have a minimum of 20 houses and a maximum of 30 houses where there is combination of other Backward Classes and caste Hindus who have come forward to take up residence along with the Harijans.

During the Second Five-Year Plan period, the provision of houses for Scheduled Tribes has also been receiving the increased attention of the Government. Under the State Sector of the Second Five-Year Plan, a ceiling of Rs. 5·53 lakhs has been provided for construction of houses for Scheduled Tribes. During 1956–57, 89 houses were constructed in Coimbatore District and about 16 houses in the Nilgiris District at a total cost of about Rs. 61,977. The cost of each house has been estimated at Rs. 900 of which the Government give a free grant of Rs. 600 by way of materials, etc., and the balance of Rs. 300 is met by the beneficiaries by way of free labour. In the case of Scheduled Tribes also, the Government have agreed to provide interest-free loans repayable in easy monthly instalments towards the cost of free labour to be contributed by the beneficiaries.

During 1957–58 the Government have proposed to construct 46 houses in Coimbatore district and 48 houses in the Nilgiris district for the benefit of Scheduled Tribes. In addition, it

Subramaniam Nagar in Salem before improvement. Now new brick and mortar houses have replaced these huts and the colony as it looks today is shown at the top of the previous page.

has been proposed to construct 94 houses for the hill-tribes in Salem, Chingleput, Madurai, Tirunelveli, North Arcot, South Arcot and Ramanathapuram Districts recently notified as 'Scheduled Tribes' at an estimated cost of Rs. 51,000.

For Scheduled Tribes.

Under the Central Sector of the Plan, a total ceiling of Rs. 10 lakhs has been fixed for construction of houses for the Scheduled Tribes. Although no houses could be constructed during 1956–57 from this allotment, the State Government have programmed to construct during 1957–58, 464 houses at a total estimated cost of Rs. 2,78,400 on the same lines as are applicable to the housing scheme of the State Sector in the Districts of the Nilgiris, Tiruchirappalli, Coimbatore and Kanyakumari.

Provision of houses to the Ex-Criminal Tribes also has been made in the Second Five-Year Plan under the State Sector. A ceiling of Rs. 6 lakhs has been provided for the entire Plan period. During 1956–57, 152 houses were constructed at a total cost of Rs, 70,900. The cost of each house is estimated at about Rs. 500 and the entire amount is given as subsidy to the beneficiaries. During 1957–58 it has been proposed to construct 152 houses at an estimated cost of Rs. 70,000.

Under the Central Sector, the Government of India have fixed a ceiling of Rs. 10 lakhs for the entire Plan period for providing houses for the Ex-Criminal Tribes. During 1956–57, a sum of Rs. 2·09 lakhs was spent in the construction of 501 houses. In some places improved types of houses were constructed under this Scheme. It has been proposed to spend Rs. 2·50 lakhs during 1957–58, towards the construction of 477 houses adopting different type design to suit the local conditions.

In addition, there is a general scheme obtaining in the C. D. and N. E. S. areas for grant of loans towards the construction or improvement of houses to deserving individuals which will essentially benefit the Harijans and other backward people in the rural parts. The maximum amount of loan that will be available for construction of or improvement to a temporary house (one with thatched roof) is Rs. 250 and in the case of semi-permanent or permanent house, the maximum limit has been enhanced to Rs. 750 per house.

It will therefore be seen that both the State and the Union Governments are making rapid strides in their efforts to provide house-sites and houses for the Harijans and the day will not be far off when the Government would have claimed that each Harijan family is living in a house of its own.

(*Continued from page* 16)

started at Kolakudi. Another unit using sun-hemp fibre in the place of wool in view of its cheapness and better qualities like easy washability, greater durability, etc. has been established at Gopalasamudram in Tirunelveli district.

There are a number of other minor handicrafts like Pith work, Palm leaf products, Bamboo and Rattan work, Palmyra stem work, Aloe fibre products, Korai mats and fancy products, Lace and embroidery, fancy leather goods, toys of clay, wood, and cloth, paper machine work, etc., for which Madras is famous. A number of departmental Centres have been opened at Thiruthuraipoondi, Manapad, Chittarkottai, Pallapatti, Mathur, Madurai, Wallajabad, Nazareth, Manamadurai, Neduvayal, Tirunelveli, Palayamkottai, Gobichettipalayam, Pallavaram, Erode, Tanjore and Cuddalore for the promotion of these handicrafts.

A Central Emporium for the sale of Handicraft products has been started at Madras. The Victoria Technical Institute which has been doing excellent work in this field has been sanctioned a loan of Rs. 2 lakhs to expand and further develop its business. Regional museums for the display and popularisation of the handicrafts of the region are functioning at Tiruchirappalli and Coimbatore. A Handicrafts Emporium at Madurai similar to the one at Madras will be started shortly. Government are also contemplating opening during the next twelve months procurement-*cum*-sales depots at Tirunelveli, Tanjore, Coimbatore, Salem, Chidambaram and Rameswaram. But the survival and development of our handicrafts depend on the patronage extended by the people of our land and the tourists from other lands.

(*Continued from page* 17)

of the Cauvery. There are 17 anicuts in the river and 25 irrigation channels irrigating about 33,000 acres of different classes of land. The project consists of a storage reservoir across the river near the foot of the Western ghats. The river drains an area of 324 square miles at the site. The dam will be about 3,715 feet long. The scheme involves the construction of a reservoir of 3,600 million cubic feet of water across the Amaravathi River and the construction of a canal for 40 miles to irrigate 15,000 acres in normal season. The existing ayacut of 32,000 acres will also be assisted during periods of scarcity. The total estimated cost of the scheme is Rs. 297 lakhs, of which Rs. 146·69 lakhs will be spent during the Second Plan period. The masonry and earth dams are in advanced stages of construction. Ninety-five per cent of the excavation of the main canal has been completed and 90 per cent of the work on the cross masonry has been completed. In addition, 20 out of the 43 direct sluices and the first seven distributaries are in progress. The project is expected to be opened very shortly and water will be let down for irrigating an area of 10,000 to 15,000 acres. It is under consideration to provide irrigation facilities for 3,000 acres of sugarcane and 18,000 acres of dry crops in place of the original 15,000 acres (50 per cent wet and 50 per cent dry) and the branches and distributaries are designed to this purpose.

The State Transport Department in Madras City earned by way of fares Rs. 12,93,960 during June 1957 with a fleet strength of 450 buses, and running a total mileage of 1,116,090 miles carrying 10,906,173 passengers. The average number of buses on the road was 297.

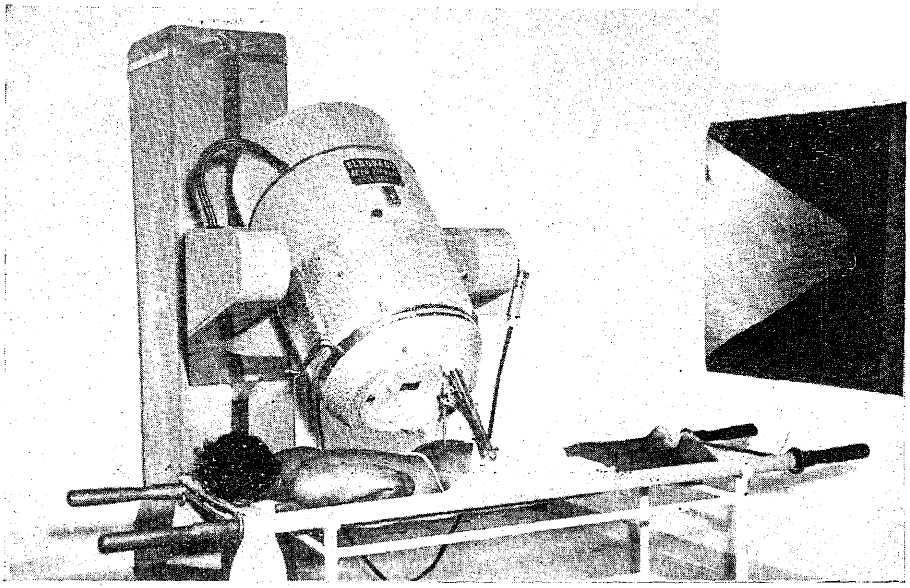
In Kanyakumari district the State Transport collected Rs. 2,00,761 by fares with a fleet strength of 76 buses, of which an average number of 52 buses were on the road.

15 OCT 1957

Cobalt Beam Treatment for Cancer

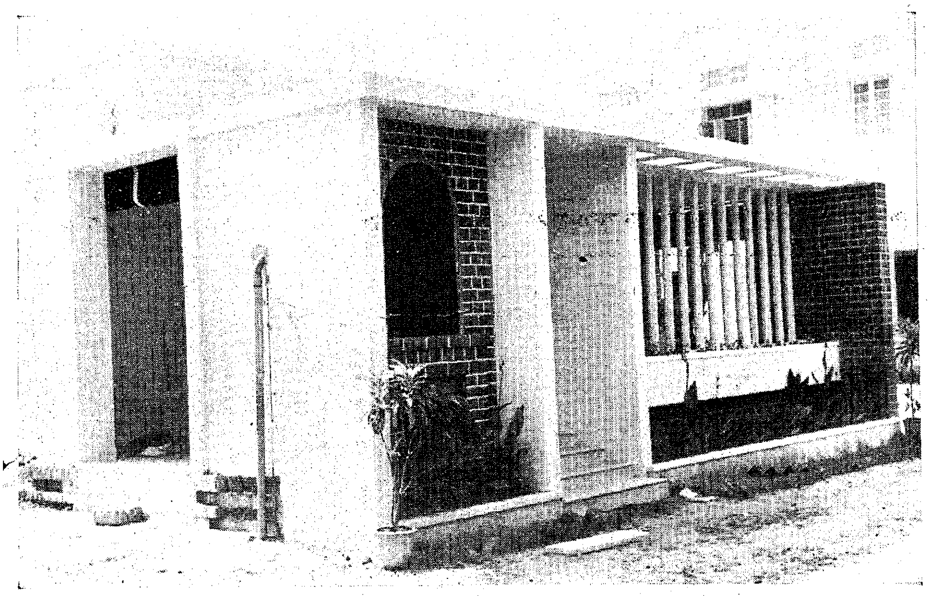
New Plant Installed in Adyar Institute

One of the most important applications of Atomic Energy in medicine was pressed into the service of suffering humanity with the installation of the Cobalt-60 beam therapy unit at the Cancer Institute, Adyar, on September 5, 1957. This " Cobalt Bomb " of the medical profession is about 200 times as powerful as the "radium-bomb " and has many hundred times the power of ordinary X-rays. Costing Rs. 4 lakhs, the Eldorado Tele-Cobalt Plant is the first of its kind to be installed in Asia, and part of the cost has been met by the Atomic Energy Commission of Canada as a gift and the remainder has been contributed by the Central Government. This will usher in a new atomic era in the treatment of malignant disease and puts in the hands of the medical profession, a powerful weapon of immense potentialities in the fight against Cancer. In the West, it has already made possible the successful treatment of many deep seated Cancers hitherto considered difficult, without the least disturbance to the patient's general health.



The building to house this powerful radio active machine has been specially designed with 18 inch thick concrete walls with many safety devices to ensure absolute protection to workers. The cost of the building alone works out to Rs. 35,000 and this is a gift to the Institute from Messrs. Satyanarayana Brothers, Raghava and Veera, Engineering Contractors. The Cancer Institute run by the Women's Indian Association is one of the finest hospital and research centre for Cancer in India and with the addition of this Cobalt equipment, it assumes a pre-eminent position in its field in the whole of Asia.

The Institute fulfils a long felt need in South India. The Sir Joseph Bhore Committee in their Health Survey Report as far back as 1946 emphasised the very great need for such an institution as this in South India. But no step in this direction was taken by anyone till the Women's Indian Association in 1949 came forward to undertake this gigantic task. Between 1955 and 1957, in the short span of two years the Women's Indian Association (Cancer Relief Fund) with the aid of Central and State Governmental grants have built up this Institution into one of the finest hospitals and Research Centres in India.



The 18" thick concrete walled building specially designed to house powerful radio active machine.

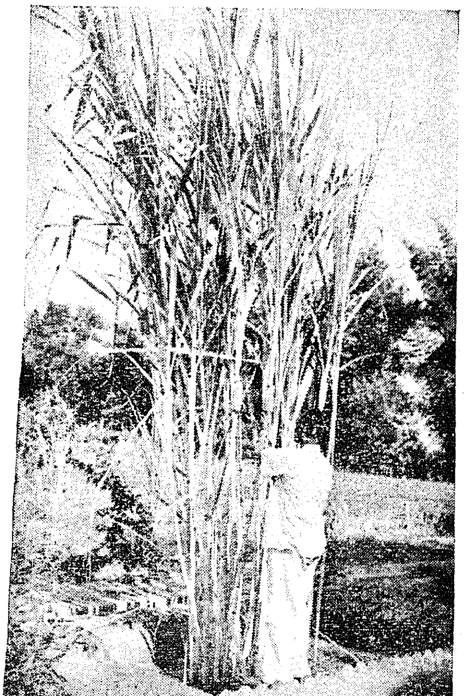
1 5 OCT 1957

Fifty Years of Fruitful Research

Golden Jubilee of Agricultural College

Fifty years mark an important milestone in the history of any institution. In the case of the Agricultural College at Coimbatore, the occasion is indeed more significant and memorable, because it is one of the oldest Institutions of its kind in India with a record of service and achievements which can be legitimately claimed as second to none in the country.

That agriculture has been accepted as the foundation of all prosperity is apparent in the context of the prime palce given it in our National Plans. It stands to the credit of our former rulers that even as early as 1876, they recognised the need for agricultural education and research and established an Agricultural School at Saidapet near Madras, which was the modest predecessor of Coimbatore Agricultural College. That school was the earliest to be started in this country.



At the Research Institute in Coimbatore, experiments are conducted on sugarcane to increase their yield and juice content.

It was soon found to be quite inadequate and was consequently closed in 1907 in which year the Agricultural College at Coimbatore came into being. But it was not until 1922 that this College was formally affiliated to the Madras University. From that year, the College has grown from strength to strength. The number of students admitted in a year which was only 20 in 1908 is now 162 for the B.Sc. Degree Course alone.

The students of this College have always been lucky in that right from the begining, there has been within the same campus an agricultural research institute. Thus research and instruction have always marched hand-in-hand. Further, the training imparted to the students in not merely academic but is also eminently practical. The three-year course leading to the degree of B.Sc (Agri.) includes a six monthly period of practical farm training in a recognised Station or Research Farm. Even apart from this six-monthly course, practical work forms a very large and important part of the curriculam. All those who are not prepared to take their full share in ploughing, reaping, weeding and other cultural operations are advised not to apply for admission. The students actually handle animals, plough the land, dig and cart manure, work the mhotes, irrigates the fields, raise seedlings and transplant them, harvest the crops, cart and thresh the produce and in fact take part in every farm operation. Thus, this College has been turning out students who are fit to impart better methods of farming to the agriculturists both by example and precept. We can justly claim that this is the very first Agricultural college in the Country to give due place and weight in the College curriculum to the familiarisation of students with every single farm operation.

The Research Institute.

The Agricultural Research Institute also has done very useful work during the past half a century and has laid firm foundations for development of scientific agriculture in this part of this country. It was in the sugarcane section of this Institute that the work on the development of improved sugarcane strains which became ultimately world famous was carried on till 1924 when the Central Sugarcane Breeding Institute was started at Coimbatore. The Herbarium of the Botany Section of this Institute which celebrated its Centenary three years ago and which this Government have since agreed to transfer to the control of the Botanical Survey of India is reported to be the Second best in India containing as it does 170,000 specimens representing the flora of South India and about 25,000 specimens representing the flora of North India. How much patient work has been done in the direction of improvement of paddy can be inferred from the fact that there is at present the Paddy Section of the Institute a collection of over 2,300 paddy strains. The results of the basic studies in the Millets Section have won recognition from outside the country and it has been recorded in the United States Year Book of Agriculture for 1936 that the contributions to Sorghum breeding made at this Institution are the best most extensive and comprehensive. Let us on this occasion pay our humble and grateful tribute to all those who had laboured unostentatiously but with single-minded devotion and zeal to build up the Agricultural College and Research Institute and bring it to its present level of efficiency, usefulness and renown.

Rs. 38 lakh expansion Scheme.

In order to meet the growing needs of the Agricultural College and Research Institute, the Madras Government have included schemes in the State Second Five-Year Plan for strengthening and upgrading the College and the Institute. The Government have proposed to spend a sum of Rs. 38 lakhs during the Plan period to provide additional accommodation, equipment, staff, etc.

The Golden Jubilee Block of buildings the foundation stone for which the Governor of Mysore laid the foundation is constructed as part of this scheme of development. There is already provision in the Research Institute for obtaining the M.Sc. and Ph.D. degrees of the Madras University by research. A proposal for starting a course leading to the M.Sc. degree by examination is under consideration. In pursuance of a recommendation made by the Joint Indo-American Team on Agricultural Research and Education, a proposal to develop this College into a strong centre for post-graduate teaching in agriculture which will cater to the needs of students not only in this State, but also in all the other States of the southern region is also under consideration.

There is nothing like *Status Quo* in agriculture or agricultural research. With the popularisation of strains of high yielding crops there is bound to be a greater drain on the fertility of the soil. Deficiencies of several food elements in the soil are also likely to result. The optimum dosage of each fertiliser or nutrient element requires to be determined, crop quality has to be maintained or improved upon, consumer preferences have to be kept in view and newer methods of fighting crop pests and diseases have to be devised. Though much has been achieved in the past fifty years, there is yet therefore, much more to be done in the future. This Research Institute with its attached Agricultural College has contributed its share towards the agricultural prosperity of the State and the region and it is not an unreasonable hope that the role would be far more significant in the years to come. That the Government at the centre and the States are fully alive to the situation is evident from the provision of thirty eight lakhs made in Second Five-Year Plan for additional buildings and equipments and the proposals that are now under active consideration to expand the activities of the Institute in all directions.

Chemistry in aid of Agriculture.

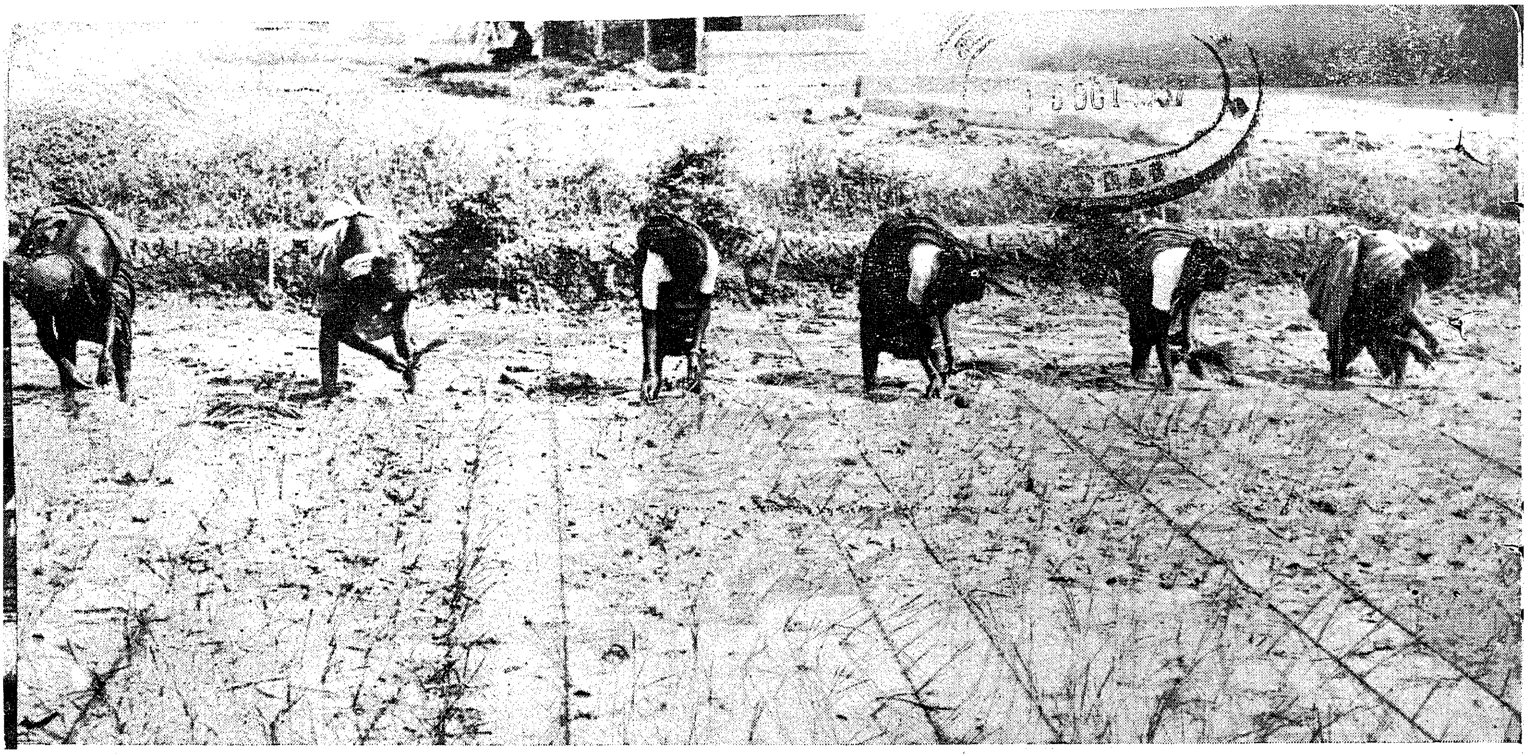
The Chemistry section has devoted considerable attention on soil surveys of the deltaic tracts of Tanjore, Godavari, Krishna and Guntur and other paddy growing tracts such as Malabar and South Kanara to assess the manurial requirements of these tracts. Soil surveys in connection with the irrigation projects were also carried out at the instance of the Irrigation department of the Public Works Department, to see the suitability for irrigation or otherwise of the lands proposed to be commanded by the project. The projects surveyed include the Tungabhadra the Cauvery-Mettur and the lower Bhavani.

The possibility of reclaiming alkaline lands under Kattalai high level channel in Tiruchirappalli and in the Cauvery-Mettur project area in Tanjore district, by the application of locally available ameliorants like gypsum and green manure was practically demonstrated by field trials.

At present the section is carrying out investigations on the use of silicophosphate, chelates, and soil conditioners, in the soils of the State. Studies to assess the role of soil micro-organisms in relation to soil fertility are also in progress.

A separate soil testing service is now in operation at Coimbatore, for rendering speedy advice to farmers on the fertility status of their soils, their manurial requirements and other matters connected with maintenance of soil fertility for good crop growth.

New strains of sugarcane evolved at Coimbatore are world famous for their juice content and profuse growth.



Rice Research Makes Headway

By Sri A. ABDUL SAMAD, Paddy Specialist.

Rice improvement in Madras started in 1913 with the establishment of the Paddy Breeding Station at Coimbatore, Later on several research centres were instituted to cater to the needs of different soil climatic zones of the State. At present, after the re-organisation of States, rice research is carried on at seven centres, with Coimbatore as the main centre and subcentres at Aduthurai and Pattukottai in Tanjore District, Tirurkuppam in Chingleput, Ambasamudram in Tirunelveli district, Palur in South Arcot and Paramakudi in Ramanathapuram district.

In the early years, the rice plant was studied in detail for its numerous characters and their mode of inheritance which is of primary importance in any crop-breeding programme. The data collected from these studies formed the basis for further research in this country and elsewhere. Subsequently, selection was taken up in the most important varieties to produce strains with high yield potentials as a result of which 62 high yielding strains were isolated, suitable for the different tracts in Madras. These strains produce 10 to 30 per cent increased yield. GEB. 24, one of the earliest rice strains evolved by the station, has established a very reputation in this state as well as in some of the neighbouring States.

Work on hybridization to combine different useful characters found in different varieties was started in 1917. This has yielded very useful results and so far ten hybrid rice strains have been produced. The benefit realised from them in terms of the money value of the increased yields is quite a sizable amount. Blast-resistant strains Co. 25, Co. 26 and ADT. 25 are outstanding examples in this line of research and these are highly popular not only in places where blast disease is a menace to successfull rice cultivation as in Tanjore district but also in other areas in the State. These strains yield 20 per cent to 60 per cent or more than the local starins depending upon the disease incidence. TKM. 6, a recently evolved hybrid strain from Tirurkuppam, which combines short duration and good quality rice is gaining a good reputation both in the State and outside. It is estimated that the improved paddy strains now cover about 50 per cent of the five million acres of rice in this State, contributing on a modest estimate to an additional production of 2·23 lakhs tons of grain annually, and a monetary benefit to the tune of 6·25 crores of rupees.

Rice agronomy.

The paddy section has been devoting considerable attention to rice agronomy from the early years. Some of the improvements are well known to progressive farmers and are being adopted now with great advantage. Raising a thin seed-bed, using a seed rate of one Madras measure of seed for one cent of nursery (10 M.M. or 251 lb. of seed for transplanting one acre) produces strong and sturdy seedlings which not only produce a good crop with high yield but also result in saving a large quantity of seed. The best spacing between plants is found to be 6″+6″ for long duration varieties and 4″+4″ for short duration varieties, with the number of seedlings per hole as 3 to 4 for early maturing varieties and 2 to 3 for later maturing varieties. However, with the introduction of the Japanese method of rice cultivation in our country, row planting is being adopted more and more using a spacing of 10 inches between rows and 4″ to 6″ between plants along the row according to the

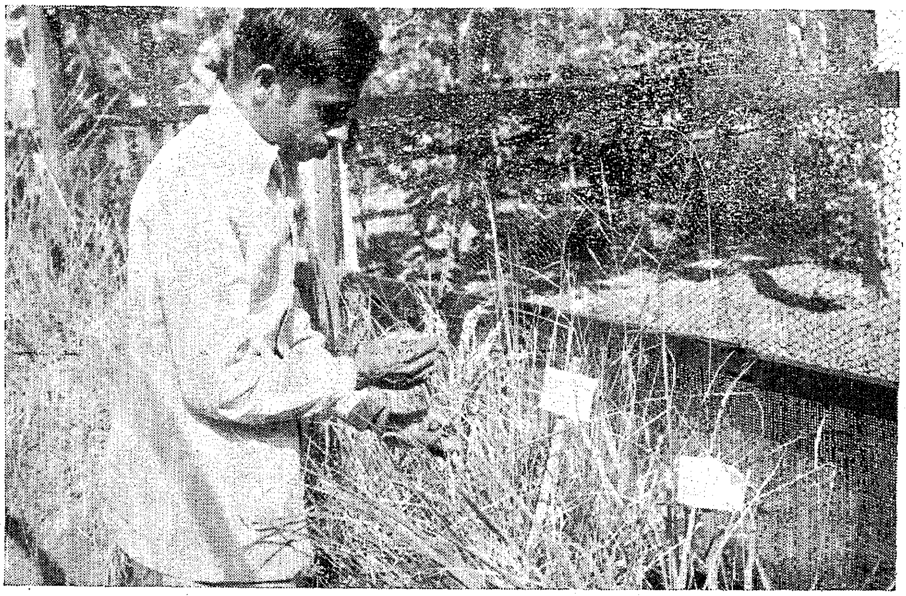
duration of the variety. Row planting facilitates interculture with rotary intercultivators thereby reducing the cost of weeding by Rs. 2 to Rs. 3 per acre.

The optimum dose of artificial manures over a basal dressing of 5,000 lb. green manure is found to be 150 lb. of superposphate at the time of planting and 150 lb. of ammonium sulphate as a top-dressing applied 4 to 8 weeks after transplanting or in two doses, one half at planting and the other half a month or two after planting depending on the duration of crop.

The adoption of these improved cultural and manurial practices has enhanced the average yield of rice in the research stations of the State to 3,000 lb. per acre, although the average for the State remains at 1,500 lb. per acre. The advent of the Japanese method of rice cultivation has given an incentive to cultivators to manure the crop with sufficient quantities of organic manures and artificial fertilizers, besides adopting clean cultivation practices.

The area under improved methods of rice cultivation in the State is about

She proudly holds a sheaf of paddy.



The yield from a particular strain of paddy is examined by a specialist at the Paddy Research Station, Coimbatore.

28·9 lakhs acres and the value of the additional production from this area could be fixed at 7·23 crores of rupees on the basis that a minimum of 10 per cent or 200 lb. of increase is secured in the yield of grain per acre.

Organic Manures.

It has been recognized that green leaf is the best organic manure for paddy, The introduction of exotic green-manure plants and shrubs such as *Sesbania speciosa, Gliricida maculata* and *Indigofera teysmanni* and the intensified propagation of these plants have not only increased the production of green manure but also reduced the cost of manuring paddy crops.

Introduction of varieties from other places has also resulted in certain benefits. Saline resistant variety SR. 26-B, introduced from Orissa is found adaptable and suitable to moderate saline and alkaline areas in the State. Short duration Chinese varieties, CH. 41. CH. 62 and CH. 63 which possess stiff straw and non-lodging character are found to do well in the *Kar* or *Sornavari* and *Navarai* seasons and compare well with some of the short duration departmental strains in yield. Over 2,300 types and varieties have been collected and are now being maintained as a germ plasm bank at the Paddy Breeding Station, Coimbatore.

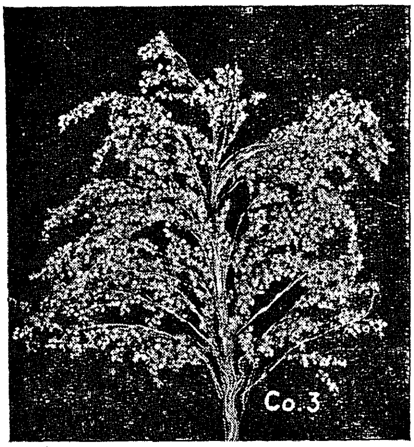
The other breeding problems under investigation are production of high yielding, drought resistant strains for an area of about 3 lakhs of acres grown under rainfed or semi-dry paddy varieties, superior alkali resistant strains for an area of about two lahks acres of alkaline areas, flood resistant strains for inundate areas to the extent of two lakhs acres in the coastal tracts short term rices possessing seed dormancy which will not germinate in the field before harvest and production of high fertility strains that will respond to heavy manuring by interracial hybridization involving *Japonica* and *Indica* varieties. The progress made in these investigations is very encouraging and before long the results are expected to be made available to the cultivators.

Thus it is seen that as a result of the improvement already effected, the country, has benefited, on a modest estimate, to the tune of about 13·48 crores of rupees per year. With the application of the results of research now in progress and the establishment of 360 State seed Farms envisaged in the Second Five Year Plan for rapid multiplication of improved seed to cover at least 85 per cent of the paddy area in the State and thereby attain the target of 40 per cent increased production or about 15 lakhs tons of paddy, the additional income to the farmer could be estimated at well over 40 crores of rupees per year.

[library stamp]

Cholam Pops Are Excellent Snacks

By Sri R. VEERASWAMY, Research Assistant.



An ear of Thalaivirichan Cholam.

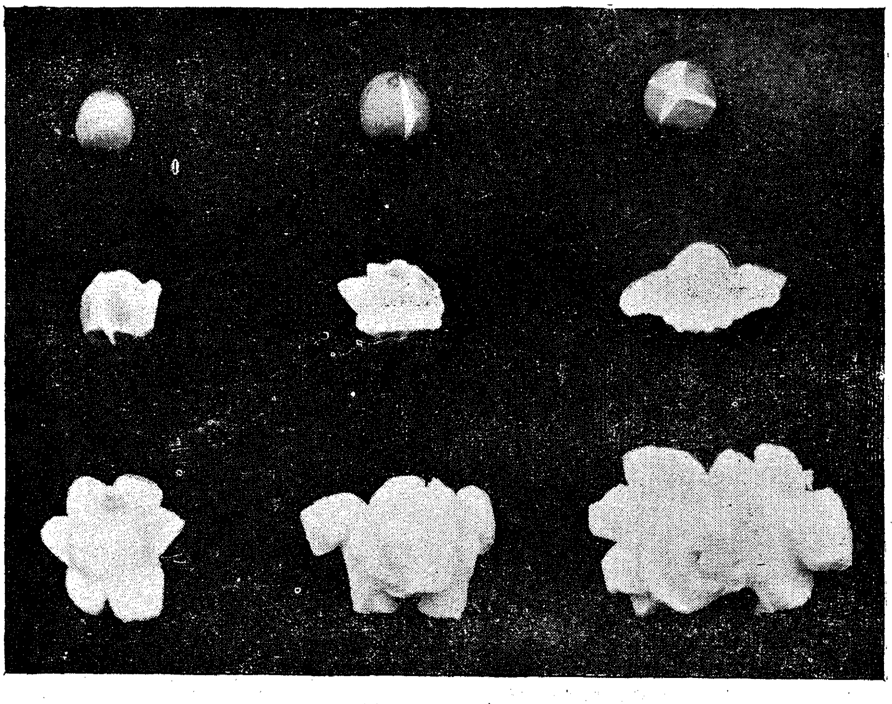
Cereal pops are popular snacks in most parts of the world. Pop-corn in America is almost an institution of the kids and grown-ups alike. The crisp touch of the pops and their sweet impression on the palate, coupled with cheapness and ease of preparation, are probably why pops are as universally agreeable as they are. In our State, corn (maize) pops are not commonly met with, since corn is grown but only in very small isolated patches here and there. But one cannot miss, in the bazaars of most of our towns and major villages, the cut-size bags in which rice pops are offered for sale. Among other pops which are popular in our State, that of cholam ranks next to rice. It is easily prepared over a pre-heated metallic pan, preferably of iron, subfecting the grains to sudden and uniform roasting.

Just as good rice pops cannot be prepared from all varieties of rice, good cholam pops cannot be obtained from all varieties of cholam. The principal dry land varieties of cholam (which are more suited for popping than the irrigated types), in our State are the '*Thalaivirichan cholam*', the '*Periamanjal cholam*' and the '*Irungu cholam*' of which the first one alone pops well. *Thalaivirichan cholam* belongs to the botanical group *Sorghum roxburghii, var. hians.* It is grown mainly in the districts of North Arcot and Salem, and also in adjoining parts of Chingleput, South Arcot, Tiruchirappalli and Coimbatore.

The reasons why some varieties of cholam pop better than others have been investigated at the Millets Breeding Station, Coimbatore. In general, the grains that pop well are of small size, and in fact, the grains of *Thalaivirichan cholam* are the smallest among all the varieties grown in our State. The pre-requisites of a good popping grain is a horny flint-like endosperm, with a thick seed coat. The trial of heat during popping, converts the moisture within the grain expeditiously. The resistance offered by the seed coat is overwhelmed by the pressure inside the grain, which results in the seed coat being rent into bits and the endosperm violently converted as a flour. Obviously, the thicker the seed coat the greater will be the force of the burst, giving a bigger size to the pop. *Thalaivirichan cholam* satisfies all these requirements for good popping. It has a horny endosperm, a thick seed coat and a suitable moisture content (10·5 per cent) within the grain.

The process of popping naturally destroys the seed, but curiously enough, the embryo remains practically uninjured except in losing its vitality. The endosperm, which suffers most in this ordeal of fire by undergoing physical distortion, is also practically unaffected in its nutritive value. Chemical analyses, before and after popping of the same variety of grain, have proved this. But there is one extra quality in the pops which is worth the trouble of preparing them, since the heat applied to the grain during popping renders the starches into simpler sugars, improving their digestibility.

Cholam pops can be conveniently prepared in any household. Mixed with jaggery treacle, or with liquid suspensions of brown or white sugar for refinement, pops make excellent eating. Using the grains of *Thalaivirichan cholam* strains Co. 3, Co. 19 and TPT. 1 would be found most suitable for the purpose.



Different stages of Popping in Cholam.

Some Recent Introductions of

Fruit and Vegetable Crops in Madras

By Sri U. NARASINGA RAO, Professor of Horticulture.

Plant introduction and acclimatisation are two of the greatest aids for agricultural development. The inmportance and economic significance that the introduced plants have attained in many parts of the world bear ample testimony to the foresight of those who first thought of this method to foster plant industries. The potato in India is a remarkable example of a crop that was unknown in India two centuries ago and has attained now a prominent place in the country's agricultural wealth. In the U.S.A. a most efficient organisation has been developed to explore diverse regions of the world for newer plants and for their introduction and acclimatisation into that country as a major plank in a nationwide programme for the improvement of agriculture.

Apart from their direct value in enriching the economic plant wealth of the country, the introduced plants offer to the plant breeder, wide range of material in hybridisation work to evolve new forms and types of consumer appeal and value.

Introduced Plants.

Introduction of horticultural plants and their trial in Madras, has been one of the chief items in the horticultural development work of the State for many years now. In fact, two of our Fruit Experiment Stations on the Nilgiris at Kallar and Burliar have served for over 50 years as testing grounds for many valuable plants introduced from other tropical regions of the world. They possess now, perhaps, the richest collection of any

A Berry fruit garden on the slopes of Shevroy hills near Yercaud. The picture in the previous page is that of a Sathukudi garden in the same area.

in this country of introduced horticultural plants. The collection consists of such fruits as the mangosteen, the avocado, the durian, the rambutan, the langsat and other horticultural plants as the cacao, the vanilla, etc. In the past two decades, inrtroductions have been made from other countries as well as from the different States in the Union and have been tested in many of our Experiment Stations. The most outstanding among these introductions have been isolated and plants and seeds of these are being multiplied and distributed to the public, preceded by wide publicity.

The following is an account of the most valued of the introduced kinds and varieties of horticultural crops of recent years :—

Fruits: One of the important commercial fruits of Madras is the grape. A recent introduction from Hyderabad, called "Anab-E-Shahi" has several desirable attributes of a table grape that the erstwhile *Pachadraksha* did not possess. It bears heavy, compact bunches, with large berries and a comparatively high sugar content of 14 per cent. The fruits have a tenuous skin and a firm pulp, two features that promote keeping quality. Its cultivation has already been taken up in Madurai district by enterprising growers. It may be well claimed that this introduced grape variety will add materially to the agricultural prosperity of the State.

Banana from West Indies.

Another major fruit crop of the State is the banana. A recent introduction from West Indies known as Gros Michel has proved to be a superior, desert type with admirable market qualities. Its bunches are cylindrical and uniform and the fruits have a tough skin enabling them to withstand longdistance transport. The flesh is creamy, with pleasing flavour and taste. The variety is cosmopolitan and grows in a wide range of soils and climates. A bunch may weigh up to 80 lb. with 100 to 150 fruits. Its cultivation is becoming popular in several tracts of the State.

Among minor fruits of the plains, the group of fruits belonging to the custard apple family stands enriched by two types introduced from Israel and three varieties introduced from Hyderabad. The former produce large fruits of excellent quality with a relatively small number of seeds. Among the three custard apple varieties from Hyderabad, one produces attractive red coloured fruits, another large, greenish fruits and the third, medium sized fruits. All the three have produced their first crop within two years of planting yielding fruits of superior taste and quality. These five selections compare very favourably with the types under cultivation now.

The group of fruits known as "granadillas" and commonly termed as passion fruits have not become popular as they desrve. Hitherto the only variety known in Madras was wholly confined to the higher elevations (above 5,000 feet) but a variety known as the yellow passion fruit introduced from Ceylon about seven years ago is found to thrive in different localities in the plains and to produce abundant crops. The vines yield 150 to 200 fruits within a year or two of planting. The fruit is used for making delicious squashes, jellies, ice creams etc.

Among fruits that are adapted to humid, dense evergreen *shola* regions at the foot hills of Western Ghats, mention should be made of two introductions of recent years. One is the Singapore jack from Ceylon, reputed to bear its fruits within three years planting. At Kallar, seedlings planted in 1947 produced their first crop in 1950, and the fruits were comparable in quality to other jack fruits. This precocious habit is not usually found in seedlings of ordinary jack. The Singapore variety has also the additional virtue yielding fruits over a very long season from February to July every year. In certain humid situations, the variety has done well in this State and its cultivation deserves to be extended in similar other areas.

Among temperate fruits several varieties of apple, plum, tree tomato etc., have been introduced. Of these, an apple variety Parlin's Beauty, a plum variety Purple King and two tree tomato varieties, Red and Yellow from New Zealand have emerged as superior types with good eating qualities.

The introduction of fruit plants for trial and isolation of superior types for extended cultivation, is being continued in a systematic manner. Cherimoyer and plum varieties from U.S.A., apple plum, and pear varieties from New Zealand, apples from Israel, a lime variety and three avocado varieties from Ceylon, several types of jack from Indonesia, Ceylon, Malaya and Philippines, the clive from Italy, a perennial strawberry variety from England are a few of such new types that are now under

test. Still others will no doubt be added in future years. Foreign introductions and those from other States have thus come to play a vital role in enriching the fruit wealth of the State and ensuring economic prosperity to fruit growers.

Vegetables.

Work on the improvement of vegetable crops in the State has been taken up only recently in an intensified research programme. In this sphere too, introduction of varieties and their trial to select the most outstanding ones, has been recognised as one of the essential steps towards their general improvement. The chief commercial potato variety of the Nilgiris, Great Scot, is an introduced one. The area of over 19,000 acres under potato in the State is almost wholly confined to this variety.

Sweet potato is another of the tuber crops cultivated over an area of 15,000 acres. There are many local varieties, but they have some defective features. Some produce tubers with dry and mealy pulp, some develop off-flavours on cooking, but a common undesirable trait is their ill-formed, spindly, small tuber. The need was felt, therefore, for the introduction of superior types possessing good qualities. Work at Coimbatore and Mangalore (in the pre-reorganisation period) has shown that three of them are of outstanding quality. These were originally introduced from America into North India from where they were imported into the State for trial. Two of these are Chinese varieties, producing large roots and yielding over ten tons of tubers per acre. One is white-skinned and white fleshed (V. 2) and the other has a red skin and creamy flesh (V. 6). Both have soft and malting, sugery flesh variety (V. 8) white skinned and white fleshed and in yield and quality as outstanding as the Chinese varieties. All these are now fast replacing the local types in cultivation, which besides their poor quality hardly give more than about six to seven tons of tubers per acre.

Another introduction of value is a perennial onion type known as tree onion. This was introduced from U.S.A. and has been found suitable for cultivation at elevations over 5,000 feet, in places such as Coonoor and

(*Continued on page* 35)

Indian Council of Agricultural Research

The Rafi Ahmed Kidwai Memorial Prizes for Agricultural Research

The Indian Council of Agricultural Research has, with a view to creating an incentive for research workers and to recognising outstanding research work done by them in the fields of agriculture, animal husbandry and allied subjects, decided to institute 11 prizes of the value of Rs. 5,000 each. These prizes will be known as "The Rafi Ahmed Kidwai Memorial Prizes for Agricultural Research" and one prize will be awarded annually for outstanding research work done in India in each of the following subjects :—

1 Agronomy.
2 Agricultural Engineering.
3 Agricultural Chemistry.
4 Agricultural Botany.
5 Agricultural Zoology (including Fisheries).
6 Horticulture.
7 Animal Breeding.
8 Animal Nutrition (including Physiology and Biochemistry).
9 Animal Diseases.
10 Dairying.
11 Agricultural and Animal Husbandry, Economics and Statistics.

2. These prizes will be in the form of gold medals or cash or both and the first prize in each subject will be awarded for outstanding research work done in the country either individually or jointly, during the Calendar year 1957, i.e., 1st January to 31st December 1957, and thereafter for such research work carried out during each subsequent calendar year.

3. The award of each of the prizes shall be based on significant advances in human knowledge in a particular subject as revealed by books, monographs or papers published in the name of the candidate or any other unpublished account of the outstanding research work done or discoveries and inventions made by him. The selection of a candidate for the award of a prize will be made on the recommendations of a Judging Committee consisting of eminent scientists appointed for the purpose by the Indian Council of Agricultural Research. The award of a prize may be made to more than one research worker and the prize money divided amongst them in such proportion and manner as may be decided by the Council.

4. All research workers, engaged in research work in India, in the fields of agriculture, animal husbandry and allied sciences are eligible for competing for these prizes. Applications should be submitted *in quintuplicate*, in the prescribed form, which can be had, free of cost, from the Additional Secretary, Indian Council of Agricultural Research, Queen Victoria Road, New Delhi. Candidates working in Research Institutes, etc., should submit their applications through the Head of the Institute/Department, etc. Others may submit their applications direct.

5. All applications should be sent in a sealed cover and addressed to the Additional Secretary, Indian Council of Agricultural Research, Queen Victoria Road, New Delhi, so as to reach him not later than the 30th April 1958. The cover of applications should be superscribed as under :—

"Application for the award of the Rafi Ahmed Kidwai Memorial Prize for Research in . . . ". Applications received after the 30th April 1958 will not be considered.

They Risked Their Lives to Save Others

Five Policemen get Kendall Medals

P.C. No. 1898, Sadasivam of Tanjore District.

The Kendall Humanity Medal of the Bombay Humanitarian League was awarded to five police constables of the State, two belonging to Tanjore district, one to Madras City Police, one to Salem district and one to Coimbatore. The names of the awardees together with a brief account of their humanitarian deeds in the discharge of their duties are furnished below. It will be noticed that, in each of these instances, the constables displayed a great sense of devotion to human life despite personal risk and rare presence of mind in a critical context where the life of a human being was involved. It is in recognition of this heroism beyond the call of duty that the Bombay Humanitarian League has chosen the constables for the Kendall Humanity Medal this year.

P.C. No. 1093, Srinivasan of Tanjore District.

P.C. No. 3409, Ramarathinam, Madras City Police.

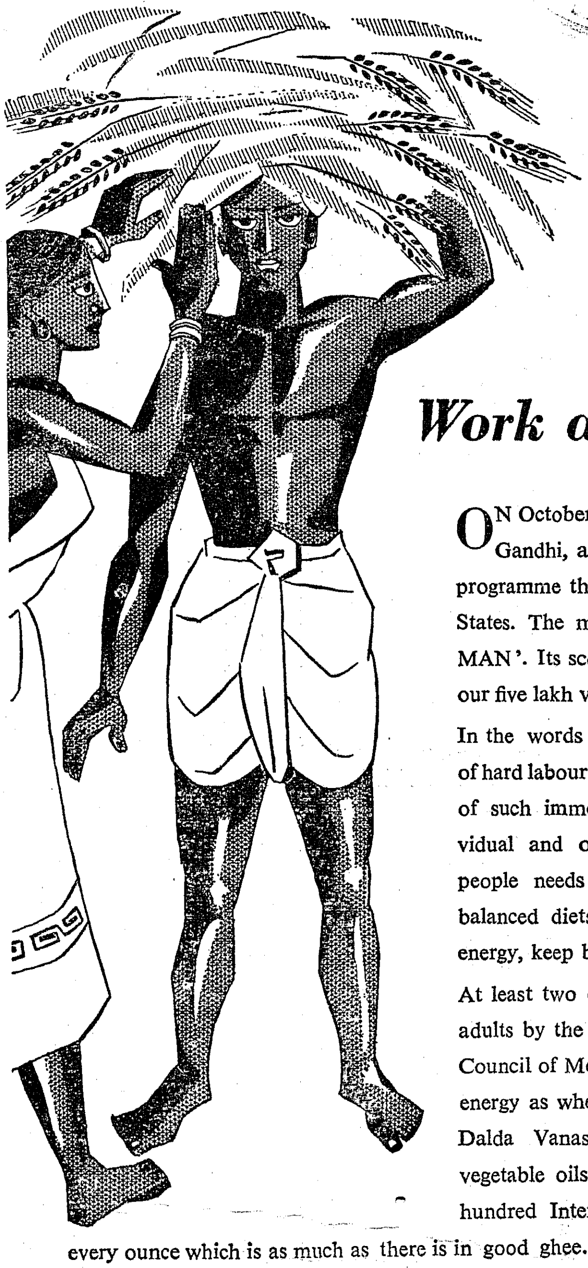
Police Constable 1898, Sadasivam of Tanjore district on 26th September 1955 at 8-30 p.m. was called to the scene of a grim tragedy, in the canal near Cadles Road Bridge, Tanjore. One Thangammal had jumped into the canal throwing her seven-year old daughter and committed suicide. Some passers by heard the frantic cries of the infant and were attracted to the spot. Police Constable Sadasivam, who was on duty near the bridge, on hearing the cries of help from the people, plunged immediately into the canal and rescued the girl. He rendered first aid to the girl and saved her life.

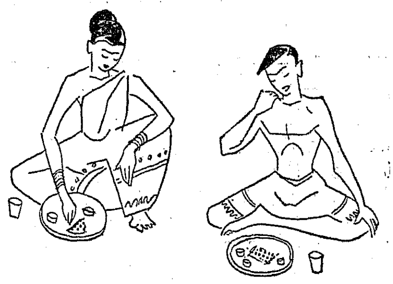
P.C. No. 1757, Rajagopal of Salem District.

Police Constable 1093, Srinivasan of Tanjore district rescued Srimathi Valambalammal, aged about 65 as she

(Continued on page 36)

P.C. No. 867, Venkatachalam of Coimbatore.





Work and Nourishment

ON October 2, 1952, the birth anniversary of Mahatma Gandhi, a daring experiment was launched—a village programme that started off simultaneously in twenty-eight States. The motto of this programme is 'Destination—MAN'. Its scope extends to sixty million families living in our five lakh villages.

In the words of the Prime Minister, 'this is a generation of hard labour.' For, a Community Development programme of such immensity means work and more work — individual and organised. And this hard-working mass of people needs proper, planned nourishment. They need balanced diets that include fats and vitamins to replace energy, keep bones strong and bodies healthy.

At least two ounces of fats per day are recommended for adults by the Nutrition Advisory Committee of the Indian Council of Medical Research. Fats provide 2½ times as much energy as wheat or rice and set up reserves against illness. Dalda Vanaspati, a wholesome fat made from pure vegetable oils, contains both Vitamins A and D. Seven hundred International Units of Vitamin A are added to every ounce which is as much as there is in good ghee. These vitamins are necessary for the sound development of bones, muscles and tissues; in addition, Vitamin A prevents night blindness and keeps eyes and skin healthy, while Vitamin D prevents softening of the bones.

Dalda is untouched by hand during manufacture, and comes pure and fresh in sealed tins with the familiar palm tree emblem. Adding extra nourishment to food, Dalda makes a valuable contribution to the diet of all hard-working people.

HVM. 310A-X52

The Social Objectives of Bhoodan*

By Sri N. MURUGESA MUDALIAR, Deputy Secretary, Food and Agriculture.

A Professor of Politics who was lecturing a student audience about socialism, when asked as to what he thought of Bhoodan, answered with an air of conviction that he thought no person either divine or semi-divine could bring about socialisation that of land by asking for gifts of lands for distribution. Those who have such misconceptions about Bhoodan would be well advised to read this little book containing the utterances and writings of Vinoba Bhave on the Bhoodan Movement.

It is well to understand that Bhoodan was not promulgated as a political programme or an economic calculations. It all happened this way. One April morning in 1951, Bhave was touring Telangana at a time when there was murder, looting and arson in that territory. At one place, at the request of the local Harijans to get some land for them, he asked the villagers to donate sufficient land for them and the villagers readily acceded. It was an eye-opener and Bhave tried this appeal in the rest of his tour and within a period of two months, he received about 12,000 acres. The results were unbelievable and Bhave received an invitation from the Prime Minister to place his views before the Planning Commission at Delhi. He walked all the way to Delhi and in the course of two months which he took to reach Delhi, he received some eighteen thousand acres of land. Subsequently at the request of friends he toured Uttar Pradesh and received as *dan* nearly a lakh of acres. For over four years now, he has walked through many States including Tamil Nad and the total gifts received are about five million acres including about 2,500 whole villages offered as gramdan.

In his earliest utterances, reproduced in the book under notice, Bhave explained the background which prompted him to make this appeal. Since Gandhiji's death, he was trying to find some field for continuing the Masters' experiments with non-violence. His work of rehabilitation among the Meo Muslims encouraged him to go to Telangana where he saw the vision of non-violence in the form of Bhoodan Yajna finding fulfilment. Ordinary men might laugh at divine inspiration, but for those who believe in God's guidance, it is tangible and real. He knew he had not the strength for the stupendous task, but he had unlimited faith.

* Review of—
" *BHOODAN YAGNA* " (*Land-Gifts Mission*) *By Vinoba Bhave—Published by Navajivan Publishing House, Ahmedabad—pp.* 134—*Price Annas* 14.

Bhave had no illusions in his mind that he was going to solve the land problem by distributing the *dan* lands. It would require five crore acres for such distribution to India's landless labourers. But his idea was not either equal nor equitable distribution of land. His idea was not to appeal for lands only from those who had in plenty but from everyone who could share. It was an universal appeal and even poor people who had a few acres gave a part of it. He explained his mission as an act of devotional service not only to the poor but also the rich. His aim was to create a psychological atmosphere for an ideological revolution, and where there is an ideological revolution life certainly marched towards progress. His aim was not to stem the tide of communism or to establish socialism but to evolve a new type of revolution in India based purely on love, consistent with her culture and ideals. Such a revolution is an historical necessity but the means was the most important thing. On one occasion he said, "My mission is not to stave off a revolution. I want to prevent a violent revolution and create a non-violent revolution. The future peace and prosperity of the country depend upon the peaceful solution of the land problem". The motive force behind this revolution was to be love and that love should be universal. He wanted to endow his mission with a popular power which he called 'loka sakthi' as distinguished from 'danda sakthi', the coercive power of the State. The object is to abolish poverty in India, not by revolution or by legislative interference but by a social consciousness. The universality of the movement is a refutation of the class-war conflict which communism holds as inevitable. The revolution of his conception stood for three things: First, he wanted a change in people's hearts ; secondly he wanted to create a change in their lives, and thirdly, he wanted to change the social structure. Nothing of these could be achieved through pressure or force but by a clear understanding of the social duties. The philosophy behind these demands is that wealth even though acquired by individual effort is not for exclusive possession and in respect of land, its sharing is not a favour that is conferred on the landless but merely a restoration to them of what is theirs by right. Because, land is not a property for direct enjoyment and the donee has to improve it and wet it with his own sweat before he can get his bread out of it. Denied this fundamental need, he is denied a human right. To enable him to satisfy this fundamental need and aspiration, it is necessary that the land should be shared. Such an adjustment Bhave calls as ' the call of the age '.

From the beginning, Bhave was not oblivious to the difficulties of distributing the gifted lands and getting them put to productive use. Collection of gift lands is the least part of the work of the Bhoodan Yajna. The main part of the work came after that. The lands collected will have to be distributed and those who receive the lands will have to be provided with the necessary resources to put them to use. In order to carry out this work, Bhave coupled an appeal for Sampathdan or sharing of property with this movement for land gifts. These two are inseparable counterparts to bring about an equilisation of prosperity, which is the ideal of Sarvodaya.

Bhave did not want to create any central organization for this work of